

THE REALIZATION OF THE AUTOSTRADA A1 IN POLAND:
A DISCUSSION OF SPATIAL IMPLICATIONS

BY

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THESIS

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ABSTRACT

The Autostrada A1 is a highway currently under construction in Poland. The Autostrada A1 will connect two major Polish ports on the Baltic Sea with industrial areas in the south of the country. Together with the construction of other major highways such as the A2, A3, and A4, it will form a network the significance of which for Poland is paralleled by the Interstate Highway system in the United States and the Autobahn network in Germany. I would suggest that almost every effect that the Autostrada A1 or its realization has had or will have on its environment carries spatial implications. Economic and demographic patterns will likely be significantly affected by the presence of a new north-south highway in Poland. The Autostrada A1 itself, the process to build it, and the transformed government and legal regimes to administer it are all Polish spaces which are merging with the greater space of the European Union while still having ties to the East. Implicit in this process is the further enablement of Poland and other Central European countries which will benefit from the Autostrada A1 to realize their full economic, political and social potential within the contemporary order in Europe and the world.

To my family

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Vielen Dank!

Спасибо большое!

Dziękuję bardzo!

Děkuju pěkně!

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PREFACE

The interconnectedness of the world has always fascinated me. Beginning from an early age I was fascinated by history, maps, and foreign languages. My interests have lead me to study the languages and peoples of Central Europe. As my interests matured and slowly coalesced around more definite academic themes, the old fundamental interest in the interconnectedness of places became a research interest in transportation in Poland. Poland is a country in transition; hardly any aspect of life remains in stasis. Poland, along with the other countries of what is now called East-Central Europe in academic literature, are integrating into the West. In an idealistic way, East-Central Europe can be seen as a symbolic bridge connecting East and West, and indeed highways currently planned or under construction in the countries of East-Central Europe are tangibly achieving this connection. One such highway is the Autostrada A1 in Poland. By various measures, it is currently one of the largest construction projects in Europe. It will have the ironic distinction of connecting East and West by facilitating the movement of people and goods between North and South. It will be a link in the chain of multi-modal transportation, bring goods by road from Central Europe to the Polish ports on the Baltic and from there to the North and to the West by sea. But trade and economics are not the only areas impacted by such a highway. Other facets of life and society in Poland will be affected greatly, in most case leading to further integration with the West. It is worthwhile considering the diverse impacts that such a highway can have. That is why I have written a thesis on this topic, the most basic goal of mine being to bring this massive construction project in Poland to the attention of those studying any aspect of the social, economic and governmental ramifications of a future highway in a country transitioning from a very different past into the future..

CHAPTER I

INTRODUCTION

Conditions in Poland require that the expansion and improvement of transportation infrastructure is necessary for continued economic growth and social cohesion in the future. Though not lacking significant rail infrastructure, road infrastructure, by comparison, was neglected in Poland for many years. Since the transition from Communism began over two decades ago, greater emphasis has been placed on expanding the road infrastructure in Poland with encouragement from international organizations, especially the European Union. Because there is wide recognition in every society that the movement of people and goods is of vital importance for a country's survival, the rationale for highways is hardly disputed at all. In spite of this widespread recognition, the larger impact of transportation networks remains often underappreciated, if not unnoticed. The impact of a given highway is often measured by means of studies employing quantitative methodologies that describe the effect of that highway on its surroundings. Quantitative methodologies, though eminently useful for the purposes of concise and tangible description, are not entirely adequate when not viewed against the qualitative background of a real-life case study. With this in mind, a background must first be constructed in order for a holistic understanding of a highway's impact to be achieved. The most basic ambition of this present task will be a qualitative description of how the construction of a new highway in Poland has affected its environment as well as the processes that have affected it. It can be considered both a very succinct story and a discussion of the beginnings of a major highway in Poland, the Autostrada A1, a four-lane, limited-access highway which will be part of a trans-European system of highways.

Much interest is devoted to corridors of contact (whether transportation, communication, or intangible connections) which bridge the European East and the European West. The designations Eastern Europe and Western Europe are both seemingly narrowly and broadly defined, although in spite of such ambiguity such distinctions have estranged two regions of Europe for centuries. There is an aspiration, if not in the very least an expectation, that transportation infrastructure stretching from West to East will connect the European continent in ways that it has not known throughout its history. It is ironic then that a highway such as the Autostrada A1, which runs from North to South, would also accomplish the task of further uniting East and West. The reason for this is in fact quite apparent. Poland's seaports, being located in the north of the country along the Baltic coast, will be gateways for the comparatively inexpensive seaborne movement of trade to and from Western Europe thereby encouraging further economic integration and consequently other kinds of integration as well. The northern terminus of the Autostrada A1 will be the port city of Gdańsk located on the Bay of Gdańsk, where the port of Gdynia is also located. Short sea shipping routes will connect Gdańsk with ports in the Nordic countries which border the Baltic Sea as well as with nearby ports lying beyond the Danish Straits. It is well known that sea borne transportation of goods is much less expensive than other forms of transportation; a fact on which the Port of Gdańsk wishes to capitalize. However, poor road transportation infrastructure has hindered Gdańsk from realizing its full economic potential in the post-communist era. Trade has served a primary means of interaction between countries and societies throughout the whole history of civilization, and therefore the need for trade corridors has always been vitally important. Recognizing that trade is vital for the economic survival of modern countries, it is then obvious why countries seek to maintain transportation infrastructure that can facilitate this trade. The trade corridor created by

the Autostrada A1 will not only be of great importance for Poland, but also for the Nordic countries because it creates a more direct land route to Central and Southern Europe for trade than is currently available. Conversely, trade emanating from Central and Southern Europe will also have a more direct route to the Nordic Countries.

As is evident from above, transportation has the unique ability to link to physically separate spaces. The consequences of connecting spaces resulting in spatial interaction are at the core of the discipline of geography. Transportation Geography is the study of the exchange of people and goods between two or more spaces and is an excellent lens through which to view the Autostrada A1. The primary task of this thesis is to view the Autostrada A1 and its effect on its environment through the lens of transportation geography. In focusing this lens properly, basic concepts of transportation geography as they relate to the case of the Autostrada A1 will be briefly discussed first, followed by the events before and during its ongoing construction and finally the effects that it is predicted to have on its surroundings. Particular attention will be paid to government administration and regulation of infrastructure in Poland as well as the ongoing construction phase of the A1. It is important to recognize that not only does the completion of the Autostrada A1 have great effect on its surroundings and indeed the whole of Poland, but the process of realizing the Autostrada A1¹ has an effect on many aspects of governance and society in Poland as well. That the process of realization of the Autostrada A1 has effected change, and has even required change in the Polish government as a precondition in order to occur, will be evident in a later section concerning the transformation of government administration in Poland since the end of Communism in 1989. The interactions between the Autostrada A1 and its environment as well as its spatial ramifications will form the basis of discussion.

¹ The other major highways currently under construction in Poland can be said to have the same effect.

There is inherent difficulty in assessing the impact of a project which is still underway. Undoubtedly more thorough and retrospective studies of the impact of the Autostrada A1 will appear after its completion and still further in the future. My aim is to discuss the mainly qualitative impacts of the realization of the Autostrada A1 and the chronology of events of its construction to date. The work presented here would probably best be classified as belonging to the sub discipline of Social Transportation Geography, a field which elaborates upon the human consequences of transportation. The full impact of the Autostrada A1 will not be known for many years, but it would only be prudent to assume that it will be substantial.

A GENERAL DESCRIPTION OF THE A1 AND ITS CORRIDOR

The northern terminus of the Autostrada A1 is the municipality of Rusocin, near the city of Gdańsk, which is in turn connected to the cities of Gdynia and Sopot by rail and a highway. Collectively this area is known as the Tri-City area. Both Gdańsk and Gdynia are ports and are in need of modern and efficient transportation links to their hinterland. The Autostrada A1 will connect the northern Tri-City area with southern Poland and Central Europe. It is significant that it will traverse the entire country from North to South, a feature that all three major highways currently under construction in Poland will have in common. It has been a long established goal of Poland to improve its often inadequate transportation infrastructure both to meet the standards of other, more developed countries in Western Europe and to provide a more viable transportation network for domestic and international commerce. In the following section I will provide a general description of the Autostrada A1, in which aspects of its location, route, and classification will be addressed.

The city Gdańsk (German: Danzig) has historically been the most important port of the central Pomeranian region (which comprised what is now the northern coastal regions of Poland). The city has seen both Polish and German domination throughout its history, but has remained under Polish sovereignty since the end of the Second World War. Prior to the expulsions of Germans living in territories which Poland annexed after the end of the War, Danzig had had a German majority for several centuries. The status of Danzig was a contentious issue between Weimar Germany and the Second Polish Republic during the Interwar Period. Danzig was declared a free city by the League of Nations, effectively making it independent of the Weimar-German Government. The Free City of Danzig was governed by its large German population which desired unification with the rest of Germany which at the time Germany still retained East Prussia, what is now the Kaliningrad Oblast of Russia. The newly resurrected Polish state demanded access to the Baltic Sea at the Versailles Peace Conference and so was apportioned a small strip of land west and north of the Free City of Danzig along the shores of the Danzig Bay (Now often referred to as the Gdańsk Bay in English language literature). To compensate for the fact that Poland was not at that time in possession of a major port, a new city, Gdynia was built to the north of Danzig and became Poland's primary port during the Interwar Period. Sopot had existed for centuries to the North of Gdańsk but was not a major port, although it has recently become a site of tourism and a place where the wealthy reside.

When Poland gained control of the entire area in the aftermath of the Second World War, the three cities, but especially the ports of Gdańsk and Gdynia became important economic centers in the country. For decades, there has been an obvious need to connect these cities to other economic centers in Poland with the construction of a major highway. Beginning in Gdańsk, the A1 will lead southwards, connecting the cities of Toruń, Łódź, Częstochowa, and

Katowice and continue to the Czech Border. All five of the above-mentioned cities have populations of several hundred thousand, meaning that the highway will be connecting many major population centers in Poland. The route of the A1 will intersect the two other major highways of Poland, the A2 and the A4 at Łódź and Sośnica (near Katowice) respectively. In addition to the major highways, several smaller highways will intersect the A1 along its length. A map of the concentrations of the population in Poland would clearly show that these three major highways connect nearly all major centers of population. The A1 roughly bisects the territory of Poland into Eastern and Western halves, for the majority of its length traversing relatively flat lowlands until it approaches the southern border regions in Silesia where the terrain becomes much more varied in the Upper Silesian Highlands. The A1 will become the Czech Highway D1 after crossing the border into the Czech Republic at the last Polish village along its route, Gorzyczki.

The Autostrada A1 will be a four-lane, limited-access highway for the entirety of its length. This is also characteristic of the other two major highways (see figure 1 at end of thesis) under construction, the A2 and A4, as well as the relatively short stretch of the Autostrada A6 which will connect the city of western Polish port city of Szczecin (Szczecin, formerly German Stettin, was only acquired by Poland after the Second World War) with the German Autobahn network. It is important to remember that these highways will be the first four lane, divided highways that will completely traverse the territory of Poland. The fact that they will be limited-access will undoubtedly contribute to safety as well as reduce the time of travel. Although the designation “limited-access” can be somewhat of an elastic term, all highways designated “Autostrada” in Poland will have no at-grade crossings and will restrict access to entrance and exit ramps. As a consequence of being limited access highways, two impressive interchanges

will channel traffic at the junction of the A1 and A2 near Łódź and at the junction of the A1 and A4 at Gliwice/ Sośnica.

The A1 will be constructed in eleven segments by various consortia. Most of the consortia will be granted a concession to collect tolls for the usage of the highway by vehicles for several decades. In addition to the road surface, other structural features of the highway will include sound barriers, wildlife viaducts, and design features which are meant to protect the environment. The design and construction of the Autostrada A1 are to be on par with the highest of standards prevailing in modern industrial countries, a fact that helps to fully realize the potential of the A1 as a vital transportation corridor for Poland.

Most of Poland is arguably the economic hinterland of the Tri-City area. As mentioned earlier, Gdańsk is the chief port within the Tri-City area, and thus should serve as the primary break-of-bulk point along a north-south trading route running through Poland. The current state of transportation in Poland favors goods being transported to the major ports of Germany and the Netherlands as opposed to domestic ports. The completion of the A1 could well shift the flow of goods northwards to Gdańsk and Gdynia. There is a certain duality in the status of the whole of Poland as a hinterland of the ports in the Tri-City area, that is to say, that nearly the whole of Poland *is currently the hinterland* of Gdańsk and Gdynia but also *their potential hinterland*. Goods from the whole of Poland do ship out of Gdansk, but not as many as are transported to and then shipped from Belgian, Dutch, and German ports on the North Sea. The A1 will help solidify the status of nearly the whole territory of Poland as a hinterland to Gdańsk and Gdynia, helping these ports to realize their full potential as transportation gateways to the sea.

Not only would Gdańsk and Gdynia have better access to their geographic hinterland in Poland, but the joining of the A1 with the Czech D1 highway would also extend this hinterland

into the landlocked countries of Central Europe. Seaports constantly compete with one another for traffic volume more than ever before, as always they are dependent upon access to their hinterlands in order to remain viable. If the main objective is to link the northern port cities of Gdańsk and Gdynia with the south of Poland and the landlocked countries of Central Europe by means of a new highway, then an additional outcome will be the increased connectivity of cities, towns, and villages along the route of the A1. The A1 will be a true artery of traffic in Poland, providing connections to all areas along its length, and while connecting the North and South, will ironically help connect East and West as well, by easing the flow of people, ideas, and goods to and from the areas formerly behind the Iron Curtain.

ARGUMENT WITHIN A MOSTLY EXPLANATORY WORK

In Geography, great importance is given to the study of how spaces interact with one another. The study of spatial relationships facilitates the understanding of such interaction. Spaces can be either physically defined, i.e. by actual location, or they can be defined by an intangible divide. Often, both physical location and intangible divides can define the same general space. Transportation can be thought of as the connection between two physical spaces. Where this occurs, the intangible spaces that correspond to the physical ones are thus connected. But what is the significance of the connecting of distant spaces? If there were not real effects of such an action, then studying the interaction of spaces connected by transportation networks would simply be a mental exercise. In the following paragraphs, I would like to address some of the theoretical issues in transportation geography as they apply to the construction of highways in Poland and as they apply to the case of the Autostrada A1 in particular. These discussions will gradually transform into the central argument of my work and will also serve to frame the topic of the construction of the A1 in an appropriate context.

Transportation linkages on the scale of a major highway, railway or waterway linking two previously unconnected (or at least poorly connected) locations or regions often assume a grand, almost mythic, image in our minds. Examples of these types of linkages include the transcontinental railroads in the United States and Canada, the Trans-Siberian Railroad in Russia, the Trans-Australian Railway, the Panama and Suez Canals, and the Interstate Highway system of the United States or the Autobahn network of Germany. In the case of the latter two, the American Interstate Highway System and the Germany Autobahn system, these road transportation networks were built at a time when railroads had long since been built, facilitating the movement of people and goods across both countries and providing a sense of unity among the respective populations in each country. From a social and economic standpoint, the Interstate Highway System and the Autobahns only provided greater access and economic opportunity, but did not contribute significantly to national unity (because it already existed!) in a political and social sense by means of transportation linkages, unlike earlier political movements and rail construction projects.²

² This has proven to be a difficult example for me to express succinctly. The United States of the 1950s and Weimar Germany of the 1930s were not fragmented countries in the sense that there already existed a collective American and German identity respectively. Decades earlier, both countries were not nearly as unified economically, socially or politically. The United States had populations unevenly distributed and indeed scattered in pockets throughout its vast territory which often had poor transportation access to one another. The fact that, prior to the construction of the Transcontinental Railroad in the 1860s, traversing the country from east to west could take many months or even a year, and was hardly a safe much less easy journey left many remote areas in the American West economically and socially disjointed from the rest of the country. The advent of the Transcontinental Railroad *fundamentally* contributed to the social and economic unity of the various population centers within the territory of the United States. In the case of Germany of the 1800s, a single German state did not exist until 1871 when the German Empire was declared upon the Prussian defeat of France. Prior to this time, Germany had consisted of dozens and at times hundreds of small principalities and a few larger kingdoms. Great geographical distances did not separate Germans from one another, but never-the-less they were politically fragmented until the unification in 1871. By the 1930s, Germans by and large saw themselves as primarily as Germans, and secondarily as belonging to a historical local origin. Thus construction of the Autobahn network was not helping to join the country in a fundamental sense as was the case of the Transcontinental Railroad in the United States or the Trans-Siberian railroad in Russia. The Autobahn network greatly eased the difficulty with which goods and people could move around in Germany as did the Interstate Highway system in the United States. Poland, like the United States and Germany, is politically and socially unified, but does require a greater capacity to transport good and people more conveniently over its territory.

Poland currently finds itself in a similar situation. Unlike the situation in many third-world countries, extensive transportation infrastructure indeed exists, enabling the movement of people and goods to all parts of Poland, but is considered inadequate for Poland's current and future needs. Poland is not a disjointed country, though its modern highway infrastructure could be characterized as such. It is not as if the construction of three major highways traversing the territory of Poland is connecting estranged or remote regions of the country. The A1, A2, and the A4 cannot pretend to have the same impact as the massive and far-reaching transcontinental rail projects mentioned above. Goods and people have long been able to move between the different cities and regions of Poland in a relatively acceptable amount of time, but the time needed to cover such distances is still too great by modern standards. The key advantage offered by the construction of the A1 is increased and improved access.

The term "access" in the context of transportation geography can have two meanings, firstly access to transportation infrastructure, and secondly access that the transportation infrastructure provides to a destination. People living in a given country must have both access to other places within that country and access to the means or infrastructure that can transport them to a destination. Susan Hanson discussed these two meanings of "access" in *The Geography of Urban Transportation*, writing, "We can talk about the accessibility of *places* (i.e., how easily certain places can be reached) or of *people* (i.e., how easily a person or a group of people can reach activity sites)."³ "Access" to places has always been of great importance to individuals, and depending upon the activity to be performed at the destination; this "access" can be provided through means that do not necessarily include the physical transportation of a person from one location to another.

³Susan Hanson, "The Context of Urban Travel," *The Geography of Urban Transportation*, ed. Susan Hanson and Genevieve Giuliano (New York: The Guilford Press, 2004), 5.

The advent of telecommunications has mitigated the restraining impact of distance upon human communication. In fact, modern electronic forms of communication have been seen by some as a way to circumvent the need for physical contact between persons. A possible conclusion that could be drawn from the enabling power of electronic communication is that the lack of physical access to Gdańsk for the purposes of communication (*not* in the case of the movement of goods) should not have hindered communication between entities (such as businesses). However, this view does not address the need for businesspersons to meet in person for the purposes of transactions or planning meetings. Although the information age has long since arrived in Poland, with video conferencing, electronic mail etc... able to instantaneously connect two spaces (the emphasis here would be on intangible or human spaces), the physical movement of people and certainly of goods is still vital and necessary.

Knowles noted that the idea that modern telecommunications have caused the “death of distance” is false⁴. The “death of distance” in this context refers to the elimination of distance as a factor in communication between two entities, by means of instantaneous access between to physical locations. In the common terms employed by transportation geographers, telecommunications provide space/ time convergence when referring to the accessibility of one distant location to another (in terms of communication and not physical presence). Thus, a time/ space convergence in Poland is only applicable to situations where one’s physical presence is not required. Time space/ convergence via telecommunications is more affordable and thus more attainable for most Poles than the mode of transportation which most approaches time/ space convergence, flight. With commuter flights being too expensive⁵, and the absence of a network of high-speed rail (although one is currently under construction between major cities in central

⁴ Richard Knowles, “Transport shaping space: differential collapse in time-space,” *Journal of Transport Geography* 14 (2006): 415

⁵ This is also the case in most wealthy countries.

Poland), faster transportation between major cities in Poland would be best achieved by road. This is the impetus for the construction of the new major highways in Poland. At present, distance is still very much a factor in Poland and could not be considered to be “dead.” *Distance* is alive and well and will continue to be a major factor for the near future. And as for *space/ time convergence*, most exasperated Poles might argue that they are not even on the same trajectory. As removed as transportation conditions approaching *space/ time convergence* may seem, that is the aim of modern transportation infrastructure, to decrease the amount of time and hardship to move people and goods from one physical location to another. A completed Autostrada A1 will create conditions which further approach *space/ time convergence*.

The idea of *space/ time convergence* is itself an abstraction, but the consequences are quite real. The consequences can be either tangible and quantifiable or intangible and lending themselves towards qualitative description, but both types of consequences have impact. The increased connectivity provided by the Autostrada A1 will have a major impact on tangible matters, such as trade and travel, phenomena whose value can be quantified. The closer contact between people that it will foster is rather more intangible. Contact between different groups, whether similar or different, fosters exchange and mutual influences. For example, the European Union has allocated billions of Euros to Poland for the purpose of constructing these new highways for the economic benefit of Poland (now a member of the EU) and for other members (Western Europe). As a precondition for aid in the form of Structural Funds, Poland was expected to make many reforms in its Government and Public Administration. These reforms seek to harmonize the norms of Poland with those of the wider European Union, which will lead to Poland becoming part of a wider European Union space. This has immense value for Poland though it cannot be easily quantified. The examples given are of merging *spaces*. That a

highway could be such an indispensable contribution to the spatial realignment in Central Europe, whether tangibly or intangibly, quantitatively or qualitatively, is truly remarkable.

And so I would suggest that almost every effect that the Autostrada A1 or its realization has had, or will have on its environment has a spatial implication, whether truly meaningful or insignificant. The Autostrada A1 itself, the process to build it, and the transformed government and legal regimes to administer it are all Polish spaces which are merging with the greater space of the European Union while still having ties to the East. Implicit in this process is the further enablement of Poland and other Central European countries which will benefit from the Autostrada A1 to realize their full economic, political and social potential within the contemporary order in Europe and the world.

CHAPTER II

LITERATURE REVIEW

In a broad sense, I have been investigating the relationship of the Autostrada A1 with its surrounding human environment. Although there is hardly any literature available about the Autostrada A1 specifically (the exception being government documents and news articles), there is a diverse body of literature that touches upon the topic of the Autostrada A1 or at least transportation in Poland in general. Much of this work is only available in Polish. Many of the studies which touch upon the Autostrada A1 do so only in passing and do not directly address some key issues in enough detail. For example, much of the available literature only addresses economic issues of transportation in Poland in general and uses the Autostrada A1 merely as an example. Other studies focus on environmental change in Poland and only use the Autostrada A1 as a point of reference. What is most lacking is an authoritative and thorough history of the realization of this highway. This is obviously due to the fact that the highway has not yet been completed, but never-the-less there is not even a thorough account of what has occurred to date.

The literature needed to write this thesis not only had to encompass information on how the Autostrada A1 was conceived and then constructed, but it has also had to include works which described the processes that needed to occur in order for the highway to be built. These prerequisite processes refer to political and administrative reform in conjunction with Poland's transition to capitalism and democracy; a much more substantial body of literature exists on this topic in particular than on transportation issues in Poland. And finally literature was needed that encompassed the theoretical facets of transportation geography which enable us to view the Autostrada A1 in a spatial environment and that address the spatial changes in Poland brought

about by the transition from communism and the construction of new transportation infrastructure. In the literature review below, research in the general areas of transportation, governmental reform and a small amount of theory in transportation geography will be examined. Finally, a brief overview of a few works that can draw the three previously mentioned areas together and form a more complete picture of the Autostrada A1 will be given. Full citations of the works examined here will be given in the bibliography at the end of this thesis.

LITERATURE ON TRANSPORTATION IN POLAND AND THE CONSTRUCTION OF THE A1

Literature on transportation in Poland is not commonly found in Western countries outside of Poland. The literature available in languages other than Polish is often in English and aimed for a wider Western audience. There is a clear lack of in-depth material on transportation in Poland and on the construction of the new system of highways in particular. Literature about the conception and construction of the new *autostrady*⁶ in Poland is currently to be found mostly in the form of government documents and news reports. Here I will begin by examining some of the more important literature available on transportation in Poland, then those sources of information available that describe the current construction processes.

There are several sources for understanding the current state and history of transportation in Poland. Information that I found useful on the topic included a chapter from a book published in 1969 titled *Geografia Polski* by Barbag and Dylikowa. This book in general is a good introduction to the geography of Poland, with the chapter of particular relevance to this study providing an overview of the history of transportation in Poland as well as trends and a good assortment of maps depicting the distribution of several statistical measures of transportation in

⁶ Note that the word *AUTOSTRADY* is the plural form of the Polish, *AUTOSTRADA*.

Poland. The work of one academic, Zbigniew Taylor, is absolutely indispensable when researching transportation in Poland. A member of the Polish Academy of Sciences and a specialist in rail transport, Taylor has regularly kept a wider audience apprised of developments in transportation issues in Poland by publishing many articles in English in addition to making contributions to theory in the sub-discipline of *social transportation geography*. In several works including a chapter titled “Recent Transport and Economic Change in Poland” in the book *Transport and Economic Change in the New Central and Eastern Europe* (1993), an article titled “Recent Changes in Polish Transport Policy” (2004), an article titled “Railway Closures to Passenger Traffic in Poland and their Social Consequences” (2006) and finally a collaboration with Ariel Ciechański titled “What happened to the national road carrier in a post-communist country? The case of Poland's state road transport” (2008), Taylor has provided a great deal of insight into the transformation of the transportation system in Poland. His work on rail transportation in particular helps to explain why there is a shift towards automobile use and consequently helps to clarify the justification for building new highways in Poland. On the subject of car ownership, Kormonicki’s article, “Factors of Development of Car ownership in Poland” in 2003 sheds light upon the explosive growth in car ownership in Poland in the last decades of the 20th Century through the present. Eamonn Judge in “The regional and environmental dimension of Polish transportation policy” examines the debate surrounding the highway construction program in Poland. Finally Jerzy Bański’s article, “Dilemmas for Regional Development in the Concepts Seeking to Develop Poland's Spatial Structure” (2009) provides useful background information to the various highway construction schemes proposed in Poland over the last half-century. The European Council of Ministers of Transport, an entity of the Organization for Cooperation and Economic Development, and the European Union have

published several studies on the state of infrastructure in Poland. A few private firms have also produced similar studies for the international business community.

The construction of the Autostrada A1 is still underway and will not be completed until at least 2015. Some segments of the highway have already been completed and others are still in the planning stages. Information about the progress of planning or construction is often available on the websites of those companies which will build and operate certain segments of the A1. The Gdansk Transport Company website provided regular press releases announcing the progress that had been made on the construction of a segment from Gdansk to Nowe Marzy. The segments of the Autostrada A1 have been built by consortia of various companies. Each consortium has a website corresponding to the segment it is building. The Polish government has also published some documents related to the Autostrada A1, among them a report on the relatively slow pace of construction titled, *Informacja o wynikach kontroli wykonywania zadań przez administrację publiczną w zakresie budowy autostrady A1 północ-południe* [Report on the Results of the Investigation into the Performance of Duties by Public Administration in the Area of the Construction of the Autostrada A1 North-South] in 2006. Press releases and government documents are currently the best source of information about the progress being made on the Autostrada A1.

POLITICS AND INTERNATIONAL RELATIONS OF POLAND IN THE CONTEXT OF DOMESTIC REFORM

The political and administrative reforms in Poland since the end of Communism in 1989 have had a major impact on Poland's ability to construct and manage new infrastructure. These reforms were often required by international organizations in which Poland sought membership

and any aid which Poland received. The two main parts of this theme of reform are internally motivated reform and externally motivated.

Internal motivation for governmental reform in Poland came as a result of resistance to the abusive rule of a system of government which was molded to the needs of the ruling communist party. Among the reforms needed was the re-establishment of sub-national levels of government. Jerzy Regulski was an advocate of structural reform of government in Poland and wrote about the reforms of the 1990s in a book called *Local Government Reform in Poland: An insider's story* in 2003. Hamilton and Roszkowski wrote about the Polish bureaucracy during communism and the early stages of the transition. Arcimowicz and Dimitrova also provide useful insights in the transformation of the Polish bureaucracy into a Civil Service along Western European Lines.

Poland's membership in international organizations heavily influenced the reforms that would be undertaken. The OECD and European Union stressed regionalization and the re-establishment of local governments. Both organizations have produced numerous policy papers to this end. They have also been active in suggesting what form that a European-wide transportation network would take and how Poland would fit into this infrastructure. Several articles from Polish authors explore the problems Poland has had in using Structural Funds given to it by the European Union as a means of financing the construction of highways. These authors include among others, Dąbrowski, "Structural Funds as a Driver for Institutional Change in Poland" in 2008 and Bukowski, Gadowska and Polak, "Bariery w dystrybucji środków unijnych a mechanizmy systemowe w (schyłkowym) państwie bezpieczeństwa socjalnego. Przypadek Polski" [Barriers to the Process of Awarding and Implementation of EU Funds and Systemic Mechanisms in the Late Welfare State. The Case of Poland] in 2008. There are many articles

which concern the Trans-European Network (TEN) scheme without any particular focus on Poland's role, but which never-the-less have been useful in producing a more complete explanation of this EU plan.

IMPORTANT THEMES IN TRANSPORTATION GEOGRAPHY

Transportation geography is rich in theories of human mobility, access, and structural planning. There does not seem to be any real lack of literature on theory in transportation geography but a shortcoming may be its predominantly quantitative nature. The approach to the Autostrada A1 in this thesis is one which emphasizes its human impact and thus the most important theoretical literature is that which concerns humans and transportation. The available sources are numerous enough that only a few select authors will be mentioned specifically but a several books on transportation geography with many contributing authors will be mentioned as well.

Knowles and Janelle have been major figures in the discussion of space/ time convergence and its relationship to human mobility. Some of their observations have served as general guidance for how I have approached the topic of the Autostrada A1 and its human environment. Farrington has written much on the topic of access as fundamental human need which enables full participation in society as well as issues related to rural access to cities. This is quite relevant to the case of Poland in general as Poland still has a large rural population and individual access to transportation and participation in society can be quite limited for some disadvantaged groups. Zbigniew Taylor has been an acute observer of trends in *social transportation geography*, his work being useful in helping to justify how an orientation toward the human effects of transportation can contribute to the theory of transportation geography as a whole. Goetz et al. produced an article which suggested how the quantitative-qualitative divide

in transportation geography might best be overcome. Three books, *Transport Geographies* (2008), *Transport and Urban Development* (1995), and *The Geography of Urban Transportation* (2003) contain contributions from dozens of respected academics in the field which further elaborate on human mobility and access.

The currently available literature is sufficient to support an introductory study of the Autostrada A1 and its relationship to its human environment as well as its spatial consequences. As the highway is not yet complete, no authoritative history or other source of information can yet be written on the topic. Time will likely produce literature which focuses more specifically on the Autostrada A1 and how it has affected its environment. More Polish government documents related to the Autostrada A1 would have been greatly helpful in producing a clearer picture of the construction program of the highway. There are excellent sources available for transportation policies in Poland, but they are few in number. Given these constraints on current research which focuses on the Autostrada A1, it is hoped that this thesis has made the most use of those sources which are available.

CHAPTER III

A GEOGRAPHIC, HISTORICAL, AND POLITICAL BACKGROUND

Economics, Geography, History and Politics are important elements which form the backdrop against which one can examine transportation in Poland. These four elements are intertwined to the point where separating one from the others is nearly impossible. Some geographic features, such as the physical landscape, are nearly constant (at least as is pertinent to the scale of time being discussed here) and others such as the locations of cities and borders are consequences of the ebb and flow of history and a changing political landscape. Historical economic trends and political events have shaped the distribution of population throughout Poland in both urban and rural locations. Transportation linkages primarily are concerned with connecting cities to one another as well as connecting sources of food (primarily agriculture) and raw materials to cities or industrial centers. Modern history has had the greatest impact on transportation in Poland as elsewhere. It was during this time, beginning in the 19th Century, that modern transportation infrastructure would arise to meet economic and political demands. The way in which governments have administered transportation have changed and have become more complex with the progression of time. The contemporary associations of Poland with international organizations are often conditional upon fulfillment of certain criteria that further integrate Poland into the collective *space* of a given organization's members. Poland's inclusion in the spaces of these organizations have in many ways contributed to improvements in its transportation infrastructure, which only serves to reinforce Poland's ties to these organizations. The criteria in need of fulfillment for membership in various supranational organizations are numerous but the important ones for the present task are political and administrative reform. The

background to be given in this chapter will be described in three sections: The first will concern the historical background of transportation in Poland in the modern era with the implicit contribution of economics, geography and political events. The second section will concern the reform of the government administration in Poland in the years since the end of Communism. Finally, the third section will concern those supranational organizations which have influenced and encouraged the political and administrative reform. The objective is to briefly show how the present conditions for building new transportation infrastructure evolved in preparation for a discussion of the current realization of the Autostrada A1.

POLISH TRANSPORTATION IN THE MODERN ERA

Although transportation routes such as roads and navigable inland waterways have existed in Poland for centuries, it was not until the 1840s that modern transportation arteries in the form of railroads appeared in the territory that is now Poland. The Prussian and Austrian partitions of Poland used the same gauge of track, however broad gauged tracks were to be found in the Russian partition. These railroads generally linked cities in the Polish territories with the capitals or major cities of the Austro-Hungarian, German and Russian empires. Due to the central location of the Polish territories among these three major empires, rail infrastructure in an independent Poland was already suited for foreign trade as well as connecting the major cities within its territory. The Interwar period saw the first major debates on the construction of a national network of highways in Poland. Many of the routes currently being built in Poland are basically in agreement with those proposed by Professor Melchior Władysław Nestorowicz in March of 1939. Any nascent stages of planning were interrupted by the German and Soviet invasions in 1939 and remained stalled until the end of the Second World War. The focus of the

following section will be to briefly summarize the history of transportation in Poland beginning in the Communist period and continuing until today.

A description of any form of transportation in Poland would be incomplete without first looking at the role that rail has played in the movement of people and goods. Rail was the incontestably dominant form of transportation for both passenger and commercial traffic in the 20th century. Although this dominance did enter into decline relative to other forms of transportation, especially road transportation, in the last decades of the century and continues to decline today, the importance of rail to Poland is unmistakable. It is important to understand how rail has affected the flow of freight in Poland in order to understand how the construction of major highways will affect Poland in the near future. Before the Second World War, 90% of freight was transported by rail in Poland, and even in the 1960s this figure was still at a high 84%.⁷ The highest concentrations of rail tracks have been located in western Poland, which has been the more industrially developed area of Poland as well. At this time, automobile ownership was not widespread and the network of roads and highways was not adequate for bearing a large proportion of the commercial and private traffic in Poland. It is not surprising then that Poland had a very high rate of passenger rail usage per capita compared to other countries (including some Western European countries) at 29 trips per person per year⁸, although by 2002 with the economic transition this number had plummeted to 6.44 trips per person per year.⁹ According to Taylor, passenger rail in Poland has lost 8% of its ridership per year since the transition to capitalism beginning in 1989.¹⁰ The trend towards high levels of car ownership and an increase in the amount of freight transported by road is a major shift from the dominance of rail. The

⁷ J. Barbag and A. Dylikowa, *Geografia polski: Część I*, [Geography of Poland: Part I] ed. Daruta Przyszasz. (Warszawa: Państwowe Zakłady Wydawnictw Szkolnych, 1968), 346.

⁸ Ibid.

⁹ Zbigniew Taylor, "Railway Closures to Passenger Traffic in Poland and their Social Consequences," *Journal of Transport Geography* 14, no. 2 (2006): 141.

¹⁰ Ibid., 139.

causes of the drop in ridership in rail are primarily economic. Taylor described the situation very poignantly, writing, “When a new market economy appeared in 1990, millions of Poles purchased private cars, while others lost their jobs. The gap between rich and poor widened. For obvious reasons, both large categories have ceased to be rail customers.”¹¹ Concurrent with the economic transition there were also changes in the rail infrastructure in Poland. Western Poland experienced a large scale closure of tracks in the 1990s. The reasons for these closures were low usage and a desire for greater efficiency. It is interesting to note that car ownership has been more common in the more affluent, western half of the country.¹² The eastern half of the country had less track, fewer track closures, less cars and was less economically affluent. There will be more discussion of spatial descriptions of changes in transportation in Poland later, but for now, there are a few more generalities to mention.

A centrally planned economy requires the concentration of resources in order to function properly. A result of this concentration of means of production is the concentration of transportation systems as well. The socialist economies of Central and Eastern Europe displayed high concentrations of freight volume compared to the capitalist Western economies. In fact, Poland had some of the highest rail freight volumes in the world¹³. This is not a claim that other modes of transportation in Poland have been able to make. While *freight* rail transportation has historically been very intense in Poland, the other modes of transportation have suffered from underinvestment or even neglect from the Polish government. Over the decades there have been increasing justifications made for the expansion of other forms of transportation in Poland. Road transportation in Poland has been recognized at least since the 1970s as key for future economic

¹¹ Ibid., 139.

¹² Tomasz Kormonicki, “Factors of Development of Car Ownership in Poland,” *Transport Reviews* 23, no. 4 (2003): 422.

¹³ Zbigniew Taylor, “Recent Transport Development and Economic Change in Poland,” *Transport and Economic Development in the New Central and Eastern Europe*. Ed. Derek R. Hall. (London: Belhaven Press, 1993), 108-109.

growth. In the 1970s the predecessor to what would become the European Council of Ministers of Transport developed plans for a continental system of highways which would link all major population and industrial centers. As a signatory to the European Agreement on Main International Traffic Arteries, Poland had routes designated by the UNECE commission. This agreement mostly remained an overambitious goal for the countries of the former Eastern Bloc. In the case of Poland, the communist government had neither the will nor the financial resources to construct highways and the idea languished until the 1990s after the fall of the Communist party-state in 1989.

The basic course of the highways which today are known as the A1, A2, and A4 were identified by the Polish government for many decades. It has long been a goal to connect all of the major cities in Poland with transportation links of one kind or another. A basic scheme was developed in the 1950s by the Państwowa Komisja Planowania Gospodarcznego (State Economic Planning Commission founded in 1949)¹⁴ but was replaced by an ambitious plan of the Government Presidium of communist Poland published by the Polish Academy of Sciences in 1974.¹⁵ In 1999, a third more updated plan was devised by the new democratic government of Poland (this will be discussed in more detail for its spatial ramifications later) containing provisions for what would become the A1, A2 and A4. These three highways connect all of the major cities in Poland as well as aligning neatly with proposed trans-European transportation corridors. The A1 connects the Tri-City area with Central Europe and ultimately the Mediterranean Sea. The A2 will run from West to East, connecting several large cities in Poland such as Poznań, Łódź and Warsaw. Running westwards into Germany, it will connect with the

¹⁴ See figure 3 taken from Dziewoński and Malisz (1978) pg 26 in an article by **Jerzy Bański**, "Dilemmas for Regional Development in the Concepts Seeking to Develop Poland's Spatial Structure," in *Regional Studies*, 1 (2009): 6.

¹⁵ See figure 7 based upon study of plan published by Państwowe Wydawnictwo Naukowe (Polish Academy of Sciences) (1974) in **Bański**, 8. (see footnote 14)

Autobahn network and lead to Berlin. The A4 will run from West to East in Poland, connecting such cities as Wrocław, Katowice, Kraków and Rzeszów and continue towards Lviv in Ukraine. Like the A2, the A4 will connect to the Autobahn network in Germany leading to Dresden.

There was general agreement for the need of an East-West route linking Germany and Western Europe with the Soviet Union and also a North-South route running through the Baltic State (then part of the Soviet Union) with Southern Europe. This North-South route would become known as the *Via Baltica*¹⁶. It would precede southwards through eastern Poland, an advantage of this route being that it would link Finland and northern Scandinavia (via ferry) with a more direct land route to Southern Europe. After crossing the border into Poland there was a proposed offshoot of this highway, the *Via Hanseatica*¹⁷, which would connect to Gdańsk. The *Via Baltica*, though it will not be a highway of the same classification as the *Autostrady*, will never-the-less become a major link between the eastern Baltic region (Finland, Estonia, Latvia Lithuania and the Kaliningrad exclave of Russia), Central Europe and the Balkans. It is currently under construction though it has experienced major difficulties with routing in the area of a nature reserve. Along with other road construction projects, there have been plans to increase inland shipping, marine and air transportation infrastructure. The Polish government continues making improvements in the transportation infrastructure in Poland to meet economic and social needs. The coming improvements in Poland's transportation infrastructure will fundamentally alter spatial relationships within Poland and also to a great extent in Europe.

¹⁶ Latin for "Baltic Road." This name is made in reference to the Baltic Sea.

¹⁷ Latin for "Hanseatic Road." The Hanseatic League was a trade confederation of cities in northern Germany and others areas of the Baltic during the Middle Ages. The cultural and historical legacy of the *Hansa* is felt and celebrated in many areas of northern Germany and across other nations along the southern coast of the Baltic Sea.

GOVERNMENT ADMINISTRATION

Nearly all forms of transportation infrastructure are either regulated or administered by governments. All levels of government, from local to national to supranational, can be involved in the creation, maintenance, and administration of transportation networks within the borders of the state. There also are arrangements between governments and private or semi-private entities which can fulfill this purpose. However, a government's sovereign authority is almost always exercised to regulate transportation. It is important to understand the structure of government administration in a given country in order to understand how that government regulates and/ or administers transportation infrastructure. The case of Poland is no exception and in fact offers a very fascinating narrative as to how government administrations were reformed in post-communist countries in order to achieve more effective governance and to adapt the structures of the state to the new market economy. The restructuring of government administration in Poland since 1989 has great importance to the growth of transportation infrastructure as the process of government decentralization has lead to local and regional governments having a voice and authority in matters concerning the construction of highways in Poland. In the following section of my thesis I will address the transformation of government administration in Poland in the two decades since the end of Communism in order to illustrate how the Autostrada A1 will be regulated and what part the various levels of government in Poland play.

Modern Poland remains fundamentally a unitary state, where lower levels of government derive their legitimacy and authority from the central government. *Government administrations* are the collection of ministries, agencies and other governmental entities which enact the laws of the land. Ministries and their subdivisions are legal entities which serve the government and implement its policies. The organizational culture of these ministries and agencies is the

bureaucracy, representing the rules, procedures and hierarchies of these organizations. A *civil service* is meant to be a professional and politically neutral core of employees in the government administration. These institutions are necessary to the functioning of every state. Governmental policies and laws are not simply realized by pure will, they are implemented by governmental administrations. In ideal form, these institutions would reflect the Weberian model of bureaucracy, though in practice, Poland as well as every other country has difficulties attaining this form. Thus the history of government administration in Poland is a very interesting one, and has direct relevance to the understanding the actions and competencies of the present day institutions in Poland.

A modern bureaucracy did not evolve indigenously in the Polish-Lithuanian Commonwealth. Offices were awarded to the nobles by the state and king as an act of patronage. Loyalty and relationships were the primary reasons one could attain an office, not professional merit. In the last years of the Polish-Lithuanian Commonwealth, as the partitioning powers encroached ever more upon the territory of Poland, attempts were made to reorganize the state culminating with the Constitution of May 3, 1791. The Constitution of May 3, 1791 would have effectively organized a modern state and a better more effective system of government which would have possibly entailed organizing government administration accordingly. However the Constitution had little time to be in effect as the Russo-Polish War of 1792 lead to its nullification. An independent Polish-Lithuanian Commonwealth was ended with the final partition by the Russian Empire, the Kingdom of Prussia and the Austrian Hapsburg Empire in 1795. The traceable heritage of Polish governmental administration then began in the partitioned lands of Poland.

The administration of the partitioned lands of Poland ranged in character from outward despotism in the Russian Partition to legalistic intransigence in the Prussian and Austrian partitions. The administrations varied based on the occupying power's own system and style of government administration. The Russians, who only knew of the Czar's supreme authority and discretion which became law, administered their Polish territories harshly and without a systematic rationale. The Prussians were slightly different since their legal and administrative system was based upon a binding codex of law. Hamilton and Roszkowski write (perhaps humorously), "The German bureaucrats in Poland, though equally narrow-minded as the Russians, were incorruptible. The Prussian, and later the German, bureaucratic machinery was more efficient since it worked within the *Rechtstaat*, the state based on law."¹⁸ Poles were not able to work in the bureaucracies of the Prussian and Russian partitions, whereas in contrast after the mid-nineteenth century, Poles constituted the majority of those employed in the public administration in the Austrian (later Austro-Hungarian) partition. Poles working in the Austro-Hungarian administration in Galicia simply were required to have a good command of German. The German and Austro-Hungarian bureaucratic models had the most lasting impact on government administration in Poland. Greater respect for laws and organizational structure would become interwoven into the state administration of the Second Polish Republic (1919-1939) when Poland regained its independence following the First World War. Many of the Poles who had gained experience in the Austro-Hungarian administration helped to form the newly emerging government administration in the newly independent Poland. The development of the government administration was stunted by the Second World War and the enormous loss of life suffered by Poland as a result of the Nazi-German and Soviet occupations.

¹⁸ Christopher Hamilton and Wojciech Roszkowski, "Bureaucratic Poland: Organized Life inside the Maverick Society," in *Public Bureaucracies: Between Reform and Resistance*, eds. Jaroslaw Piekalkiewicz and Christopher Hamilton (New York: Berg Publishers, 1991), 136.

With the end of the Second World War and the onset of the Communist era in the late 1940s, the government administration was slowly transformed into an apparatus of the ruling communist party. This change occurred quite slowly but was complete by the mid- 1950s. The purging of ideologically unreliable bureaucrats took time, as the future reliable communist bureaucrats had to be trained for their new functions. Even under a totalitarian regime, bureaucracies are often slow to change, as their expertise is needed in order to ensure the smooth functioning of government and the essential services that government provides. Once this process of purging was completed, the newly politicized bureaucracy became virtually inseparable from the ruling communist party. The communist party used the bureaucracy to control the lives of everyone in society. After the reorganization of the state in the Constitution of 1976, municipal governments were abolished *de jure*, though they had long since lost any significant powers to the central government. Governmental subdivisions on the regional and local levels were simply local officers of the central state bureaucracies. Only party-related positions would then continue to exist at the local level. The complete centralization of power within the politicized bureaucracy of national government lead to staggering inefficiency, especially in the economic sector. Central economic planning was the cause of misappropriation of resources and infrastructure throughout the country. This topic will be covered in greater detail in the next section, but for now it suffices to say that such administrative and political organization lead to a plethora of problems and seemed nearly incapable of the rational functionality required of a Weberian bureaucracy. In an attempt to increase the efficiency of a hopelessly intractable bureaucracy, the Polish government passed a law in 1982 that sought to provide for a definition of the roles of employees in government administration and set minimum

standards of professionalism. Poland was the only Eastern Bloc country to attempt such a reform, though it did little to stop the further deterioration of the communist state.

Throughout the 1980s opposition to the regime mounted in Polish society culminating with end of the communist party's monopoly on power in 1989. The Solidarity movement gained the majority control of the parliament and began to implement reforms in every sphere of public and private life. Free elections were among the first benefits of the revolutions of 1989. But as the communists discovered in the early years of the People's Republic of Poland, so did the pro-democratic reformers discover that transforming a bureaucracy from the previous regime is a painfully slow and frustrating process. The most senior ministers were replaced first, and the process of purging the bureaucracy of anti-democratic forces had begun. Hamilton and Roszkowski write,

one may characterize the ...Polish situation as involving not only the collapse of the one-party state or the introduction of a kind of pluralism, but the collapse of some forty years of Party-dominated bureaucratic practice, *nomenklatura*, top-heavy and misdirected management of the basic forces of the economy and public policy, and the control of advancement, merit and managerial talent through Party incentives.¹⁹

As we will see, the bureaucracy was largely reformed at first by the reorganization of the state. With the reestablishment of sub national government entities, the once monolithic single bureaucracy was divided among the new levels of government.

The reestablishment of local government became a pressing issue for Poland, as these reforms were needed to create the conditions where the benefits of democracy could be felt at a local level and the people familiarized with democratic institutions. The smallest level of government in Poland, the *gmina*, was reestablished in 1990 after having been dissolved in 1976 and relegated to irrelevancy long before that. A *gmina* is equivalent to a municipality although it

¹⁹ Hamilton and Roszkowski ,145. (See footnote 18.)

can be either urban or rural. In cases where a city is large enough to encompass the entire area of a *gmina*, the governments are combined as one. One of the major proponents of reestablishing local government was the newly elected parliamentarian Jerzy Regulski. Regulski was instrumental in forwarding the agenda of local government reform in Poland during the early 1990s. His account about decentralization, *Local Government Reform in Poland: An Insider's Story*, provides many details of the legislative and implementation processes involved in the realization of reestablishing the *gminas*, including the rationale behind these processes. For example, he writes that over 100,000 employees of the central government's administration were transferred to the *gminas* so that they would be staffed.²⁰ To secure their separate legal status from the central government, *gminas* were able to control their own finances and to acquire and own property. Regulski and other proponents of local government in Poland sought and succeeded in establishing *gminas* first, so that when the next levels of government, the *powiats* and the voivodships, were established, the *gminas* would not be legally dependent on the higher levels of government.

Powiats form the second lowest level of independent government in Poland. A *powiat* is somewhat analogous to an American county and again it may have an urban or rural designation, and very large cities may fuse their governments with that of the *powiat*. The *gminas* were allowed to form *powiats* amongst themselves which came into being along with the reorganized voivodships in 1999. *Powiats* have responsibilities in the areas of secondary education, land surveying, public transportation (local systems), health care, maintenance of some roads and vehicle registration.

²⁰ J. Regulski, *Local Government Reform in Poland: An Insider's Story* (Budapest: Open Society Institute, 2003), 31.

Voivodships (note: anglicized form of Polish *województwo*) form the provincial level of government in Poland. They possess the most powers and authority of any of the levels of sub-national government, although they are subject to direction from the central government. The voivodships were reorganized from forty-nine to sixteen in 1999. Voivodships administer an array of government programs, oversee local governments, and are largely responsible for transportation infrastructure within their boundaries.

The establishment of the various levels of government in Poland did not mean that its status as a unitary state was changed but simply that sub national levels of government could assume a legal personality and responsibility to govern the people living within their boundaries. The division of the a large single unitary government administration amongst the various levels of government would also divide the bureaucracy and create new ones to fill the void left by the lessening of direct governance of the central state.

Now that the restructuring of government in Poland has been addressed, I will now turn my attention to how the bureaucracy itself was reformed during the years after communism. As mentioned earlier, the bureaucracy was slow to change after the transition to democratic government. Many individuals who were left over from the Communist era did not want to adjust to the new norms. Corruption was rife and still remains a major problem to this day. The reform process also had to take into account that employees in the government administration needed to be a professional body, thus in 1991 a school of public administration was set up to train future civil servants. Further reform was stymied by inertia in the *Sejm* or Polish parliament. The former communists and the successors to the Solidarity movement feared that reform of the bureaucracy would strengthen one camp at the expense of the other.²¹ Finally in

²¹ J. Arcimowicz, "Civil Service in Poland- Regulatory Framework, Political Conflicts," in *Socieatas/ Communitas* 1.7 (2009): 214.

1996, the Civil Service Reform Act was passed. This Act defined the role of the Civil Service as well as the standards of professionalism to which employees were expected to adhere. It sought to create a politically neutral Civil Service which would function independently of party control. However the Act was sweeping enough to cause discomfort for some of the elected officials who in 1998 changed the provisions of the act to allow for more political appointments, allegedly to the benefit of the then Prime Minister.²² More changes were made in 2006, although in a much less controversial direction. The Sejm expanded the number of appointed positions but mandated that the nominees had to come from the newly established National Pool of Human Resources. Candidates in this pool are required to possess at least a Master's degree, no criminal history, have five years of professional work experience, a good reputation and knowledge of at least one working language at the European Union.²³ These provisions are meant to instill meritocratic values in the Civil Service. This is an important step in the professionalization of government administration in Poland. *Meritocracy* and not *nepotism* should be the deciding rationale for employment.

Decentralization and the establishment of a professional Civil Service have been very important measures taken to ensure the most rational, efficient and effective forms of government administration are available to the Polish state to implement economic and structural reforms. This becomes essential when considering the size of the task before the government as it confronted the state of infrastructure in Poland. Accepting that modern infrastructure is vital for economic growth, we can see why the competent and rational management of transportation infrastructure projects is essential for their success. An emerging market economy such as

²²Antoaneta L. Dimitrova, "Europeanization and Civil Service Reform in Central and Eastern Europe" in *The Europeanization of Central and Eastern Europe*, eds. Frank Schimmelfennig and Wulrich Sedelmeier. 1 Vol. (Ithaca: Cornell University Press, 2005), 86.

²³ Arcimowicz, 215. (See footnote 21)

Poland does not have to resources to spare for ill-planned and unnecessary projects. Every project must be carefully chosen for its potential and overall effect on the economic situation of the country. This requires a professional public administration which is capable of regulating such activities fairly and impartially.

The story of the changes in government administration have lead to a point where it is necessary to mention the main government agencies involved in transportation. Currently there exist two ministries, the Ministry of Infrastructure which absorbed the former Ministry of Transport (official name in Polish: *Ministerstwo Transportu i Gospodarki Morskiej*)²⁴ and the Ministry of Regional Development (*Ministerstwo Rozwoju Regionalnego*). A non-cabinet-level agency working in conjunction with these ministries is known as the *Generalna Dyrekcja Dróg Krajowych i Autostrad* (GDDKiA) (the General Directorate for State Roads and Highways)²⁵, which incorporated the former Motorways Agency in the early 2000s. Government bodies responsible for transportation have been reorganized numerous times when it was clear that doing so would foster efficiency and reduce redundancy within the government administration. In addition to lack of funding, poor government administration and lack of organization are commonly cited as reasons for the current state of transportation infrastructure in Poland.

The Polish government has had a history of making overly optimistic plans for the completion of new highways. Despite the plans, announcements, reforms, and hype, construction on the three main highways, A1, A2, and A4 had not commenced until the second half of the 2000s. The delays in the realization of these highways have been lamented by nearly

²⁴ For the sake of clarity, I feel using the English “Ministry of Transport” is more readily recognizable than the full original name in Polish. The designation “Ministry of Transport” or some other derived form is commonly used as a standard term in English for cabinet-level government departments (i.e. ministries) responsible for transportation within a given country. In the case of the Polish agency “General Directorate for State Roads and Highways,” the Polish acronym *GDDKiA* is more succinct and unambiguous than the English translation. Thus when referring to this agency, the Polish acronym *GDDKiA* will be used.

every observer. One can hardly find an article on the topic wherein an author remarks that the realization of these highways has been repeatedly delayed without there at least being at least an implied sense of frustration with the performance of the Polish government behind the author's written words. Remedies for the slow pace of realization are elusive, but some are placing their hopes in new arrangements concerning the construction and administration of new highways between the public and private sectors.

The trend of the last fifty years towards privatization can also be seen in area of transportation infrastructure. Transportation infrastructure is deemed to be a public good²⁵ and therefore is most often associated with a government. Governments use taxation to fund the expensive construction and maintenance of highways, rail and canals. However, governments have many expenditures that *must* be made in other areas and thus cannot always afford to administer infrastructure an efficient way. An opening has existed in many countries for private companies to build and administer infrastructure under the supervision of the government. One arrangement, the Build-Operate-Transfer type (BOT), is created when a company builds a highway, operates it, and then after a certain period of time transfers it back to direct government administration. The highway would remain a public good because it would be open for all to use (although often for a fee in the form of a toll). The government relugates the activities of the managing company, insuring that no private company could have free reign over a public good. A Desing-Build-Finance-Operate (DBFO) arrangement envisions a private company being the responsible party for a highway from its inception to its completion and use, while securing its own financing to do so. DBFO arrangments receive exclusive contracts from the government which will of course regulate all activity on or concerning the highway in question. These types

²⁵ Public goods, are communal resources that are generally, but not always, free and open for everyone to use. There is often a sense that the resource (a highway for example) belongs to the people as a whole.

of arrangements are called the Public-Private Partnerships or PPP. The conditions do not automatically exist for PPPs to be created. Public-Private Partnerships should ideally result from competitive bidding from private companies on the open market. Companies must feel confident that the government will honor all agreements and that strict legally binding assurances can be given. Private companies must also be confident that their participation in such a partnership will be profitable to them as a company. The legal framework for these arrangements must be legislated. Poland has sought to establish a lasting legal framework for the existence of PPPs though with some delay. Public-Private Partnerships can exist between any level of government and a private company or consortium, but in the case of Poland, subnational levels of government first had to become independent legal entities for this to be realized. The reform process has been long and arduous but have been encouraged by Poland's memberships in various international organizations, especially those which are primarily centered in Europe, chief among them the European Union. The external impetus for Poland's reforms will be the topic of the following section.

INFLUENCE OF THE EUROPEAN UNION AND OTHER INTERNATIONAL ORGANIZATIONS

There exist a large number of international organizations in Europe that seek coordination and cooperation across the continent. These organizations include the Council of Europe, the Organization for Security and Cooperation in Europe (OSCE), the Organization for Economic Cooperation and Development in Europe (OECD), the North Atlantic Treaty Organization (NATO), and most importantly the European Union (EU). Poland belongs to all of these organizations as well as the Vysegrád group of Central European states (Czech Republic, Hungary, Poland and Slovakia). These various organizations emphasize different aspects of

cooperation between member states. Some are especially oriented towards defense and security such as NATO, others are oriented towards trade and political integration such as the EU, and the Council of Europe and OSCE are forums for solving disputes among nearly all European states (including nonmembers of NATO and the EU). The Vysegrád group was intended to provide economic and security cooperation among the Czech Republic, Hungary, Poland and Slovakia in the 1990s before all four of these states entered the European Union in May 2004. These organizations to which Poland belongs have all influenced its development since the end of Communism in 1989, some more than others and at different stages in Poland's transition. The objective of the following section is to explore the general ways in which these organizations have influenced Poland, especially in relation to Government Administration, decentralization, regionalization, and other programs to promote the growth of civil society institutions in Poland. Furthermore, these organizations have encouraged the integration of Poland into various economic structures across the continent. All of the above mentioned areas of emphasis have great importance for transportation infrastructure.

After the collapse of Communism in Central Europe in 1989, the European Community created the PHARE (Poland and Hungary: Assistance for Restructuring their Economies) program in that same year. As the name suggests, initially this program was intended for Poland and Hungary but was later expanded to include other transition countries in the region as well. The stated goals of PHARE have been the following:

1. Strengthening public administrations and institutions to function effectively inside the European Union.
2. Promoting convergence with the European Union's extensive legislation (the *acquis communautaire*) and reduce the need for transition periods.
3. Promoting Economic and Social Cohesion.²⁶

²⁶ European Commission, "Enlargement 2010," http://ec.europa.eu/enlargement/how-does-it-work/financial-assistance/phare/index_en.htm.

These goals were set for aspiring member states to reach in order to join the European Union at a future date. They provided much impetus for reform in the governments of Central and Eastern Europe. This was the beginning of the relationship between the European Community (after 1992 the European Union) and Poland. The Organization for Security and Cooperation in Europe had existed as an informal forum since the early 1970s, its chief accomplishment being the signing of the Helsinki Final Act in 1975. The Helsinki Final Act recognized borders among signatories, resolved to use peaceful means to settle conflicts, sought to improve East-West relations and offered a forum for discussion and cooperation of various issues among participating states. The OSCE produced the Paris Charter, signed by Poland in 1990, which sought to integrate the former socialist countries of Central and Eastern Europe into the West. Poland along with Czechoslovakia and Hungary formed the Vysegrád triangle on February 15, 1991, which would later become the Vysegrád Four because of the breakup of Czechoslovakia into the Czech Republic and Slovakia. The goal of the Vysegrád Four was to promote common trade and security among its members and to prepare the way for their integration into Western Europe. In November 1991, Poland joined the Council of Europe.

On February 23, 1993, Poland confirmed its commitment to the concept of local governance as espoused by the Council of Europe (note that this is not the European Council of the European Union and is in fact outside of the European Union) and signed the European Charter on Local Government. Poland had already reestablished local government by law in 1990, thus such a diplomatic and political instrument as the European Charter on Local Government was an important act of reinforcing the progress made in this area. In November 1996 Poland joined the OECD. This was an important step for Poland because as a member,

Poland was expected adhere to several core principles. The OECD expects that its members will abide by the following:

- 1) Full compliance with the non-discrimination, transparency and standstill principles.
- 2) liberalization of long-term capital movements and a timetable for future further liberalization.
- 3) an open and transparent regime for Foreign Direct Investment.
- 4) No restrictions on payments and transfers in connection with international current-account transactions.
- 5) a relaxation of restrictions on cross-border trade in services, principally financial services.²⁷

These agreements were significant because they required Poland prepare itself structurally for economic growth as a result of foreign investment. Foreign Investors require a stable legal and political climate with guarantees of safety for their investments, whether dealing with the Polish government or private companies. This concept will become important as foreign investment in infrastructure is discussed in subsequent sections.

As the 1990s progressed it would be the European Union and NATO which would influence the internal and external affairs of Poland most greatly. Perhaps the paramount principle of the European Union is that of economic unity among member states. To achieve this end, the means include a common currency, a common agricultural policy, and a general policy advocating the integration of transportation networks across the continent. Membership in the European Union is certainly a transformative experience for nations wishing to join. NATO membership required solid democratic institutions, and civilian control of the military, criteria which Poland had met by the time it joined in 1999. In the area of economics and infrastructure, the influence of the EU on Poland has been unparalleled by any other organization.

²⁷ Robert Ley and Pierre Porret, "The New OECD Members and Liberalization," *OECD Observer* 205 (1997): 38.

The most powerful form of influence that the EU can wield is that of conditions for membership. In order to attain membership, many candidate countries must go through rigorous restructuring of their economies and legal codes in order to qualify; Poland was no exception to this process. As mentioned earlier, the EU requires that national governments act to protect the right of subnational governments to exist and function. The quality of democracy is thought to be felt strongest on a local level, therefore the EU promotes local democratic government administration. The EU policies maintain that local governments are more aware and responsive to the immediate needs of their citizenry than a removed national government. The strongest emphasis seems to have been placed on support for local governments, though the importance of regional or provincial level government is also key. Wider latitude exists for the member states to define the powers and authority of regional governments. In this regard the EU has echoed the Council of Europe, which stated that newly created regional governments, “ could be defined very broadly, including regions which are merely subordinate levels of the central government, or else narrowly, whereby the only expression of regionalisation is the region as a territorial authority... ”²⁸ The EU persuades candidate countries to adopt these changes as part of the *acquis communautaire*, or the corpus of EU law which must be adopted by a candidate country in order to join the EU.

In addition to the advantages of membership in the world’s largest economy, as well as political and security ties to this organization of largely wealthy and influential Western European States, one of the great advantages given to new member states is the receipt of structural funds from the European Union. Structural Funds are meant to improve regional economic performance and raise the standard of living closer to the EU average. This attempt to

²⁸ Council of Europe, *Regionalization and its effects on local self government*, 64 (Strasbourg: Council of Europe Publishing, 1998), 9.

equalize economic performance among the regions of member states is known as the *Cohesion Policy*. Ruth Downes summarized the situation thusly, “as economic reform has continued, its spacial ramifications have become increasingly clear, thus forcing the issue of regional policy response onto the political agenda.”²⁹ It is a very holistic policy aimed at reforming government administration, encouraging the growth of Civil Society and providing for the general prerequisites of strong economic growth in democratic societies. The allocation of structural funds by the European Union to member states is tied to the ability of the regions of a country to manage the funds. As can be expected, one of the most tangible benefits that Poland has received since joining the EU in May 2004 has been the allocation of structural funds.³⁰ The EU’s policies concerning transportation, especially road transportation, and their importance for Poland will be addressed below.

Economic and political success in Europe is largely thought to depend upon the quality of the transportation and telecommunication networks that will bind the continent together. For transportation links to be effective at promoting trade across borders, the countries of Europe have had to coordinate their efforts at maintaining national infrastructures which join together to form a larger continental infrastructure. These efforts are not only limited to members of the European Union, but also included many European countries outside of the Union and on occasion even African and Middle Eastern Countries which are located on the periphery of the European continent. Thus many different international forums aside from the European Union are needed which offer non-EU member states full membership and equal voice in transportation

²⁹ Ruth Downes, “Regional Policy Evolution in Hungary,” *Transition, Cohesion and Regional Policy in Central and Eastern Europe*. ed. John Bachtler, Ruth Downes, and Grzegorz Gorzelak, (Burlington, VT: Ashgate, 2000), 258.

³⁰ Andrzej Bukowski, Kaja Gadowska and Paulina Polak, “Bariery w dystrybucji środków unijnych a mechanizmy systemowe w (schyłkowym) państwie bezpieczeństwa socjalnego. Przypadek Polski.” [Barriers to the Process of Awarding and Implementation of EU Funds and Systemic Mechanisms in the Late Welfare State. The Case of Poland.] *Studia Socjologiczne* 1, no. 118 (2008).

affairs. Handley Stevens provides an excellent and *badly needed* explanation of the interplay of the various international organizations which influence transportation in Europe in his book *Transport Policy in the European Union*³¹. For the purposes for discussing and governing transportation in Europe, forums with membership which extends beyond the European continent, such as the United Nations Conference on Trade and Development (UNCTAD) and the International Maritime Organization (IMO), but not the OECD³² (which has non-European members, though only comparatively prosperous ones), are not given preference by the Europeans. Stevens gives the reason for this European preference, essentially writing that the European Countries did not desire that poorer non-European countries would have any say much less be able to interfere in European transportation matters, especially in ways that would be beneficial to the domestic shipping industries of these smaller non-European countries.³³ The European Council of Ministers of Transport (ECMT) is attached to the OECD. The advantage of this organization is that it does not exclude but instead gives full membership and voice to those European countries which are wealthy and democratic but not part of European Union, such as Norway and Switzerland. In the mid 1990s the OECD began to expand to include the Visegrád countries (Czech Republic, Hungary, Poland, Slovakia). The OECD is a prolific publisher of reports on economic and political matters in member countries. Its usefulness as a source of statistical information on its member countries is probably not matched by any other international organization. The ECMT meets to plan a pan-European network of transportation

³¹ Hadley Stevens, *Transport Policy in the European Union*, The European Union Series (New York: Palgrave MacMillan, 2004), 25-30.

³² The OECD was original as post-WWII organization of the US, Canada and many of the Western European countries which had suffered damage during the war for the purposes of coordinating reconstruction efforts. Its membership would expand to include almost all of Western Europe and Scandinavia. Later countries in Latin America and the Asia-Pacific region were added as the focus of the OECD shifted from reconstruction to serving as a coordinating body of comparatively *wealthy* and *democratic* countries. Those members which are not incontestably European include: Australia, Canada, Chile, Japan, Mexico, New Zealand, South Korea, Turkey and the United States.

³³ Stevens, 27-28. (See footnote 31.)

corridors and to coordinate transportation policies. Stevens refines the purview of the ECMT, stating that it concentrates on “policy issues relevant to the development of economically and technically efficient surface transportation systems”.³⁴ The coordination of the pan-European numbering scheme for highways (for example, the designation of a route as the E 75, in this case the Autostrada A1) is part of the work accomplished by these international organizations.

The work of the OECD is complimentary to that of the European Union. The European Union has devised the Trans-European Network (TEN) scheme of transportation corridors (see figure 2 at end of thesis). That part of the network which consists of highways is sometimes called the Trans-European Motorway network or TEM. The creation of this scheme was included in the Maastrich Treaty of 1992 which transformed the old European Community into the European Union. Further political and economic integration was a goal of the treaty and therefore network of transportation corridors, the TEN, was seen as crucial for the realization of economic and social cohesion throughout the EU.³⁵ The completed TEN network would have 30 major transnational routes and would contain 89, 500 km of road by 2020 at a cost of € 600 billion.³⁶ These corridors are primarily land corridors (either rail or road) but can include ferry routes in areas of corridors where it is necessary. An example would be when transporting goods and people from highways in the Scandinavian Peninsula across the Baltic Sea onto highways on mainland Europe. This is important for many routes, including the E 75 of which the Autostrada A1 is a part. Traffic from Scandinavia can be transported by ferry across the Baltic to Gdańsk in Poland, from where it can continue southwards along the Autostrada A1/ E 75. The European Union is more capable of realizing a transportation scheme such as the TEN network because it

³⁴ Ibid., 29.

³⁵ Charlton, Clive, and Tim Vowles, “Inter-Urban and Regional Transport,” *Transport Geographies.*, eds. Richard Knowles, Jon Shaw and Iain Docherty, (Singapore: Blackwell Publishing 2008), 128.

³⁶ Ibid.

can help national governments finance the construction and maintenance of new railways and highways or it can help with the cost of upgrading existing infrastructure. An integrated transportation network is important to the EU because it is essential for continued growth and competitiveness of its internal common market. Banister et al. observe that the ‘spatial-economic forces’ of a “drive towards an open economic network” and a “drive towards more completion between regions” are acting upon Europe.³⁷ If the ECMT (part of the OECD) can at most coordinate national transportation systems in Europe, then the EU could potentially unite them. As with all aspects of European integration, this process will be very slow.

Everything from safety standards, to network density and financing are issues that need to be addressed at the EU-level, although aside from safety standards, most of the major issues with transportation are still decided at the national level. The EU holds more sway in developing economies in Central Europe due to the financial assistance in the form of structural funds (SF) given to them by the EU. But even in these cases it is still difficult because as Banister et al. write, “One of the main frictions in European transport policy is the absence of a strategic view of the European transport system as a single entity at all geographic levels.”³⁸ This mentality is changing, albeit slowly. As a thought, I would suggest that the conditions that countries must meet in order to qualify for structural funds, the standards to which new infrastructure must be built, the standards to which it must be managed or administered, the stringent environmental protections and the methods of financing these projects could at least imbue the qualifying recipients of the structural funds with a notion of a collective, union-wide transportation system. The allocation of structural funds is dependent upon the conditions mentioned above. The European Union carries out detailed surveys of its member states to determine the amount of aid

³⁷ David Banister, Dominic Stead, Peter Steen, Jonas Åkerman, Karl Dreborg, Peter Nijkamp and Ruggero Schleicher-Tappeser, *European Transport Policy and Sustainable Mobility*, (London: Spon Press, 2000), 28.

³⁸ Ibid., 33.

that they will receive. Structural funds are allocated to regions of countries and not as a large single payment to the central governments. Allocating funds in this way is meant to complement and strengthen the EU's policy of regionalization. Regional governments (i.e. provincial level), county level and local governments are all potential recipients of SF. The fact that applying for and receiving SF from the EU means that these sub-national levels of government are coming into contact with the European Union and thus will feel closer to the whole of the EU than they otherwise would. Another benefit of sub-national governments controlling the SF allotted to them is that they will be more familiar with their real needs than a national government. The use of structural funds for the purpose of promoting regionalization ultimately makes these regions more economically competitive.

Competitiveness at all levels within member countries remains a goal of the European Union. Regionalization is widely held as a positive trend although some fear that it will weaken national governments and fragment countries which have striven for unity for centuries. A possible consequence of regionalization specifically related to regional planning is that coordination at the national level could be deemphasized and which could lead to further disparities between regions. It will be some time before a good assessment of regionalization in Europe can be made due to the relatively recent emergence of regionalization policies in modern European history. It would seem that any negative consequences of regionalization would have greater consequences in the long term as regionalization affects governmental and economic institutions which are very slow to change. More research is needed in the area of studying negative consequences of regionalization despite the fact that regionalization is currently regarded as having an overwhelmingly positive impact in Europe.

Returning to the case of Poland, it will be attempted here to briefly describe some of Poland's difficulties using structural funds. Poland has received structural funds for the following periods, 2004-2007 and for 2007-2013. Although structural funds can also be used for building public venues such as concert halls and parks, the vast majority of the SF received in Poland has gone to transportation infrastructure, and within that category overwhelmingly towards the construction of roads and highways. Projects must be justified to the EU and excess funds, or funds that failed to be allocated, must be returned to the EU. Surprisingly, the failure to allocate SF was a major problem in Poland during the first period 2004-2007. An important contributing cause to this problem was the overly bureaucratic processes required by governments to approve projects.³⁹ In fact, the duality of administrations leads to redundant procedures across many different agencies.⁴⁰ These bureaucratic obstacles were exactly what the EU was hoping to avoid when it was pressuring Poland to reform its bureaucracy in the 1990s, but as mentioned earlier in this chapter, bureaucratic reform is an especially gradual process. Dąbrowski laments the complex bureaucratic situation Poland in which Poland finds itself, writing, "One can hardly imagine a more complicated system of distribution of the SF than the one which has been put in place in Poland. It is composed of approximately 100 institutions in charge of implementation, intermediation and management of the SF."⁴¹ He later writes that, "A dominant feature of the political culture of Polish local leaders is a reluctance to co-operate and a lack of a strategic long-term vision of development transcending the borders of the commune."⁴² Dąbrowski wishes to be clear that all levels of government in Poland are responsible for

³⁹ Marcin Dąbrowski, "Structural Funds as a Driver for Institutional Change in Poland," *Europe-Asia Studies* 60, no.2 (2008): 234.

⁴⁰ Bukowski, Gadowska and Polak.,18.

⁴¹ Dąbrowski, 234. (See footnote 39)

⁴² Dąbrowski, 237. (See footnote 39)

impeding the full usage of structural funds by their actions.⁴³ It should be remembered, that on the whole, Poland has been able to improve its infrastructure and consequently its prosperity through the receipt and usage of structural funds. The reforms undertaken in the 1990s to improve its bureaucracy and quality of governance, though incomplete, have undoubtedly made the process of using such aid more transparent and efficient than it could have otherwise been.

SOME CONCLUDING THOUGHTS FOR CHAPTER III

Reform may not be a linear process, at times seemingly leading to nowhere, but it does have a point of origin, a reference point from where it began. It is necessary to have left that point of origin to be in the current location. It is not as if well-managed highways and the proper legal and administrative conditions existing for PPPs are somehow the highpoint of the sum total of political and economic reforms in Poland, but they certainly are a result of it. New highways, the institutions or arrangements to manage them, and membership in European Union are only part of the larger success of Poland's transition of the last 20 years, but one can see how many different events and accomplishments coalesced together and in time produced the proper political, administrative and legal conditions for the realization of a new mobility created by network of highways, among them the Autostrada A1.

⁴³ Dąbrowski, 238. (See footnote 39)

CHAPTER IV

THE REALIZATION OF THE AUTOSTRADA A1

This section will describe the stages of realization of the Autostrada A1. The goal is to provide a clear and understandable chronology of the events which are still underway as this is being written. For the sake of clarity and organization, the chronologies presented below will be divided among the different segments of the Autostrada A1 which have been or are being constructed. The information provided will address the actors involved, i.e. the responsible government agencies, supranational organization, and construction consortia (including their members), concession agreements, effects on adjacent areas during construction, and public private partnerships (PPP). The majority of information has been derived from government reports, news media, and company publications.

The need for a North to South highway in Poland had been felt for some time. Already in the 1960s there was a desire to build such a highway although nothing resulted from this general plan. A small section (less than 20 km) of what would become the Autostrada A1 south of Łódź was built in the decade preceding the collapse of the Communist government in 1989. During the transition to a capitalist economy, financial resources were scarce and the Polish government could not afford to begin massive infrastructure projects. However, in 1993 the Council of Ministers of the Republic of Poland made the decision to construct a highway stretching from the Tri-City area in the north of Poland to the Czech border in the south. The initial timeline for completion was quite ambitious and was of course not realized. The Supreme Chamber of Control of the Republic of Poland (Polish: Najwyższa Izba Kontroli, hereafter referred to by its Polish initials NIK) is the highest auditing institution within the Polish government. A report

released by the NIK in May 2006 is critical of the fact that the Polish government had not completed the construction of the A1 in the timeline set forth.⁴⁴ Among the reasons cited for the slow progress in the realization of the A1's construction or lack thereof were delays in the purchasing of plots on which the highway was to be constructed.⁴⁵ The whole length of the A1 encompassed some 21,700⁴⁶ plots of land of which only 5,531⁴⁷ had been purchased by mid-summer 2005. The effort to purchase all of the needed plots of land has been a very long and complicated process. A fundamental cause of the complications has been the disarray in which the cadastral infrastructure in Poland finds itself, a situation described in detail in a study conducted by Francis Harvey.⁴⁸ The NIK also reported the companies acting in the name of the GDDKiA had improperly handled the purchasing of plots, leading to protests from the sellers in certain areas along the route of the A1.⁴⁹

The Autostrada A1 has been divided into eleven segments for the purposes of construction (see figure 3 at end of thesis). The construction of each segment was allocated to different consortia. Neither the length nor the scope and scale of the construction process for is divided evenly among the eleven segments. Currently, none of the consortia have fully completed the segments of the Autostrada A1 which were assigned to them. The description of the realization of the Autostrada A1 to follow will be structured around each segment of the highway under construction.

⁴⁴ Najwyższa Izba Kontroli (NIK) (Supreme Chamber of Control of the Republic of Poland), *Informacja o wynikach kontroli wykonywania zadań przez administrację publiczną w zakresie budowy autostrady A1 północ-południe*, [Report on the Results of the Investigation into the Performance of Duties by Public Administration in the Area of the Construction of the Autostrada A1 North-South] (Warsaw, Poland, May 2006), 7.

⁴⁵ Ibid., 8.

⁴⁶ Ibid., 30.

⁴⁷ Ibid., 30.

⁴⁸ Francis Harvey, "Of Boundary Objects and Boundaries: Local Stabilization of the Polish Cadastral Infrastructure." *The Information Society* 25, no. 5 (2009): 315-327.

⁴⁹ NIK pg. 31 (See footnote 44)

SEGMENT *GDAŃSK – NOWE MARZY*

Because this particular segment of the Autostrada A1 is the beginning of a road corridor providing Gdańsk with access to its hinterland, it can safely be stated that it has received particular emphasis from both government and media circles. The great importance of this segment can also be seen in the fact that it is closer to completion than any other segment of the Autostrada A1. The Gdańsk Transport Company (GTC) was founded in 1996 and received the concession in 1997 to plan, build, maintain and operate two segments of the Autostrada A1, called Phase 1 and Phase 2, stretching from Gdańsk to Toruń. The GTC collectively advertises these two segments of the Autostrada A1 as AmberOne, in reference to the amber trade in the region throughout the centuries. The Ministry of Transport and Maritime Economy (which has since been renamed the Ministry of Transport) granted the concession to the GTC until 2039. The Gdańsk Transport Company was originally a consortium of Skanska, Intertoll Polska Sp. z o.o.⁵⁰, and Nederpolska (commonly referred to as NDI SA⁵¹). It is interesting to consider for a moment where these companies originate. Skanska is a Swedish company which is world renowned for its construction services. Intertoll is originally from South Africa and has tremendous experience in the operation of toll roads. NDI SA is a domestic Polish company specializing in the organizing and management of investment projects in the commercial real estate market and in infrastructure development. Intertoll Polska will be the operator of the completed segments of the Autostrada A1 between Gdańsk and Toruń, whereas Skanska and NDI were to fulfill the obligations of the Engineering, Procurement and Construction (EPC) contract. This was made possible by the Gdańsk Transport Company subleasing the EPC contract to a joint venture of Skanska and NDI, in which Skanska owns 80% of the shares and

⁵⁰ Note that the Polish acronym, **Sp. z o.o.**, *Spółka z ograniczoną odpowiedzialnością*, is an equivalent of the English designation LLC or Limited Liability Company.

⁵¹ Note that the Polish acronym, **SA**, *Spółka akcyjna*, is the equivalent of the English JSC or Joint Stock Company.

NDI 20%.⁵² The GTC consortium has come to include John Laing Infrastructure Ltd. of Great Britain as well. With the addition of John Laing Infrastructure, the shares in ownership of the Gdańsk Transport Company are now divided as follows: Skanska 30%, John Laing Infrastructure 30%, NDI 25% and Intertoll Polska 15%.⁵³ The GTC secured full financing for the project from the European Investment Bank and the Nordic Investment Bank.

In October 2005, work commenced on a 25 km long section of the A1, stretching from Gdańsk, specifically from the village of Rusocin to Swaróżyn. This section of highway is at the northern end of the segment from Gdańsk to Grudziądz (the southern end of this segment is variously reported as Grudziądz or Nowe Marzy, though in fact the two locales are quite near to one another.) Along the length of this 25km section three interchanges at Rusocin, Stanisławie and Swaróżyn were to be built along with three bridges of at least 150 meters in length. On December 22, 2007 the section of highway from Rusocin to Swaróżyn was opened for traffic. Although the A1 is a toll road, tolling did not begin until February 20, 2008 for the above mentioned segment. A traffic bottleneck at the site of the interchange and toll booth in Swaróżyn in early May 2008 was a cause for frustration among drivers and residents. In a press release dated May 6, 2008, the GTC apologized for the inconvenience caused by the road conditions and explained the dual causes of the bottleneck, namely the temporary status of the Swaróżynie interchange as a terminal interchange (a function for which it was not designed) and consequently not having a sufficient number of toll booths and secondly the fact that traffic exiting the highway via the interchange was channeled onto the smaller trunk road 22, which was

⁵² Gdańsk Transport Company S.A. *Our Partners*, AmberOne: Autostrada A1. <http://www.autostradaa1.pl/en/company.html>. (accessed February 6, 2010) (in Polish)

⁵³ www.laing.com (accessed April 11, 2010)

not designed for heavy traffic.⁵⁴ In October 2008, the section of highway between Swaróżyn and Grudziądz (65 km) was opened to traffic and thus nearly bringing the first segment, known as Phase 1, of the Autostrada A1 from Gdańsk to Grudziądz (90 km) to completion, although some structures located alongside of the roadway such as sound barriers had yet to be finished.

SEGMENT *GRUDZIĄDZ – TORUŃ*

On June 30, 2008, the Gdańsk Transport Company won the concession to construct this segment of the Autostrada A1 in addition to the segment stretching from Gdańsk to Grudziądz. The construction of this 62 km segment from Grudziądz to Toruń is known as Phase 2. The estimated cost was approximately € 11.7 million per kilometer.⁵⁵ The Grudziądz-Toruń segment will contain three bridges, two of which will span the Vistula river. Other features along this segment will include five interchanges, five toll collection sites, and four travel centers. On August 25, 2008 there was a groundbreaking ceremony attended by the Minister of Infrastructure, GTC officials and even the local Catholic Bishop to mark the beginning of the earthworks for the highway. On December 12, 2008 three investment banks, the European Investment Bank, the Nordic Investment Bank and the Swedish Export Creditors' Corporation signed an agreement with the GTC and Minister of Infrastructure Cezary Grabarczyk to finance the construction of the Grudziądz-Toruń segment and thus finalizing the

⁵⁴ Original Polish fragment: "Po pierwsze, węzeł w Swaróżynie nie został zaprojektowany jako węzeł zjazdowy, przez co jego przepustowość jest mniejsza niż np. węzła w Rusocinie. Dla porównania na węźle w Swaróżynie zaprojektowano trzy bramki poboru opłat, a w Rusocinie funkcjonuje osiem. Po drugie, w Swaróżynie, zjazd z A1 prowadzi na drogę krajową nr 22, która także nie jest dostosowana do przyjęcia dużego natężenia ruchu." Reported by Gdańsk Transport Company SA (May 6, 2008, *Korki na A1*, (Press Release) AmberOne: Autostrada A1. <http://www.autostradaa1.pl/pl/aktualnosci/4/korki-na-a1.html>. (accessed February 6, 2010) (in Polish)

⁵⁵ Gdańsk Transport Company SA (July 1, 2008), *GTC zbuduje drugi etap autostrady A1*, (Press Release) AmberOne: Autostrada A1. <http://www.autostradaa1.pl/pl/aktualnosci/3/gtc-zbuduje-drugi-etap-autostrady-a1.html>. (accessed February 6, 2010) (in Polish)

appropriate agreements needed to realize Phase 2. The construction is still ongoing and the planned completion for this segment will be in December 2011.

SEGMENT *TORUŃ – STRYKÓW*

This segment of the Autostrada A1 will be 144km long. At present, it is still in the planning stages and no construction contracts have been awarded. In the Spring of 2010 the Polish government began the process of bidding for the construction contract. While the two segments awarded to the Gdańsk Transport Company will be held as concessions in the form of a Public Private Partnership, the Polish government will maintain ownership and control over the Toruń-Stryków segment.

SEGMENT *STRYKÓW – TUSZYN*

This segment of the Autostrada A1 will be 41 km long. It is presently still in the planning stages and will not likely be completed until around 2015.

SEGMENT *TUSZYN – PIOTRYKÓW TRYBUNALSKI*

This segment of the Autostrada A1 has the distinction of having been built by the communist government in Poland from 1978-1989. It was to have been part of a highway which would have run through the same corridor as the present Autostrada A1, but which was never completed. Much repair is needed for this segment to conform to the standards of the rest of the Autostrada A1. This segment encompasses a total length of 17.5km.

SEGMENT *PIOTRYKÓW TRYBUNALSKI – CZĘSTOCHOWA*

This segment of the Autostrada A1 will be 82 km long. It is presently still in the planning stages and will not likely be completed until around 2015.

SEGMENT *CZĘSTOCHOWA – PYRZOWICE*

This segment of the Autostrada A1 will be 57 km long. It is presently still in the planning stages and will not likely be completed until around 2015.

SEGMENT *PYRZOWICE – SOŚNICA*

The construction of this segment is currently underway. The total length of this segment is 44.4 kilometers. Construction has been divided into four smaller segments, the southernmost and shortest of which at 2.2. km was opened to traffic at the end of December 2009 as it was connected to a major junction with the Autostrada A4. The three remaining segments to the north are expected to be completed within two years. The total worth of the construction project of the *Pyrzowice – Sośnica* segment is PLN 6,110,346, 577.92 of which the EU contributed PLN 6,027,826,613.92.⁵⁶

SEGMENT *SOŚNICA – BELK*

The Sośnica – Belk segment of the Autostrada A1 is the first phase of three in what is called the *Sośnica Project*, or the construction of the highway beginning at the junction with the Autostrada A4 near Gliwice and continuing south to the Czech border. The *Sośnica – Belk* segment was completed and opened to traffic in December 2009. The project encompassed both a construction contract and a contract for management and supervision of the construction process. Bidding was opened for a contract to manage and supervise construction on February 2, 2006, with a contract being signed on August 18, 2006. The value of this contract was € 3, 307,687.45. Bidding was announced for a contract to construct the segment on March 28, 2006 and a contract was signed on January 22, 2007, being valued at € 213,493,865.61. The

⁵⁶ Budowa Autostrady A1 na odcinku Przyrowice – Sośnica, “Dane ogólne”, <http://www.a1-pyrzowice-sosnica.pl/dane-ogolne> (accessed 04-11-10) (in Polish).

completion of construction was expected to take 24 months from the time of signing. The whole project cost, including the value of the contracts awarded, stood at € 242,718,000 of which EU Structural Funds contributed € 193,803,465.

SEGMENT *BELK– ŚWIERKLANY*

The Belk – Świerklany section of the Autostrada A1 is approximately 14.1 km in length, forming the middle phase of the Sośnica Project. It begins at the Belk interchange and continues until the village of Świerklany from where the final section running to Gorzyczki and the Czech border will begin. The Polish government will directly administer this section of the Autostrada A1, and will assume the costs of construction itself with the help of Structural Funds from the European Union. The qualified cost of this segment's construction is € 339,941,906, with the contribution of the EU Structural Funds being € 224,361,658 or nearly two thirds of the total cost.⁵⁷ The Polish government awarded two contracts encompassing the construction and administration and supervision of construction. The contract for the management and supervision of the construction project was opened to bidding on June 13, 2007 and signed on October 18 of the same year by the GDDKiA and a consortium comprised of *Drogowa Trasa Średnicowa SA* and *Integral Sp. z o.o.* The contract is valid for the duration of fifty months and worth € 3,412,571.80⁵⁸. The bidding for the construction contract was announced on August 10, 2007 and a contract was then awarded to the consortium comprised of *STRABAG Sp. Z o.o.* and *Heilit+Woerner Budowlana Sp. Z o.o.* and signed on August 8, 2008. The construction contract

⁵⁷ Biuro Budowy Autostrady A1 na odcinku Belk – Świerklany, “Dane ogólne” <http://www.a1.belk-swierklany.pl/> (accessed 04-11-10) (in Polish).

⁵⁸ Biuro Budowy Autostrady A1 na odcinku Belk – Świerklany, “Opis projektu”. [Construction Office of the Belk – Świerklany Segment of the Autostrada A1. *Project Description*], http://www.a1.belk-swierklany.pl/opis_projektu.htm (accessed 04-11-10) (in Polish).

was to last twenty one months from the moment of signing (though not including the three months of winter between December 15 and March 15) and was worth € 285,183,028.56⁵⁹.

The construction work began in September 2008 with the felling of trees and the removal of top soil along the route of the highway. The construction project involves substantial alterations to existing voivodship roads as well as *gmina* roads. Dozens of bridges are being constructed that will serve the Autostrada A1 itself or will cross the width of the highway providing no access. Among these structures are eight autostrada bridges, three autostrada viaducts, three road bridges, nine road viaducts and one rail viaduct. Several passages are being built to facilitate animal crossings of the highway including four for large animals, three for medium-sized animals and thirty-two for small animals. This last example of consideration being given to the movement of animals is indicative of the high standards to which both Poland and the European Union will be holding in future developments. The construction continues and is projected to be finished and opened for general usage in 2010.

SEGMENT *ŚWIERKLANY – GORZYCKI*

The segment of highway from Świerklany to Gorzyczki will form the southernmost extent of the Autostrada A1. It is a relatively short segment when compared to many other segments, especially those built or in another stage of realization in the North of the country. The total length of this segment is 18.4 km, though obscured in this small number are many engineering and construction challenges. Once at Gorzyczki the Autostrada A1 will immediately cross the border into the Czech Republic and join the Czech highway *Dálnice D1*⁶⁰. The project for this section of the Autostrada A1 is comprised of two contracts, the first concerning the

⁵⁹ Ibid.

⁶⁰ Note that the Czech designation, *Dálnice*, is the equivalent of a Polish *Autostrada*, that is to say, a limited-access, four lane, highway, with no at grade junctions.

administration and supervision of the segment's construction and the second concerning the construction of the segment. The Polish government will directly administer this segment of the Autostrada A1 upon its completion.

The contract to construct Świerklany – Gorzyczki segment was opened to bids on November 23, 2006 and an agreement to construct was reached on October 18, 2007. This contract was worth € 272,729,203.70⁶¹ and at the time of signing was to be completed in 26 months. The consortium of builders were all part of the Alpine Bau⁶² group: *Alpine Mayreder Bau Gmbh* of Austria, *Alpine Bau Deutschland* of Germany, and *Alpine stavební společnost Cz* of the Czech Republic. The separate task concerning administration and supervision of construction was opened to bidding on January 13, 2007, a contract for which was awarded and then signed on May 21, 2007. The contract for administration and supervision of construction was valued at € 2,758,139.13⁶³ and was intended to last 43 months. Progress on construction this segment of the Autostrada A1 was quite slow. In December 2009, the Polish government revoked the contract of Alpine Bau as it could no longer tolerate the delays in construction. The Polish government has sought new bids for contracts. Construction is expected to resume sometime in late 2010.

A FINAL NOTE ON THE CONSTRUCTION OF THE AUTOSTRADA A1

As the construction of the various segments of the Autostrada A1 is ongoing, further progress has been made on some of the segments. During the writing of this thesis both progress

⁶¹ Biuro Budowy Autostrady A1 na odcinku Świerklany – Gorzyczki, “Dane ogólne”, [Construction Office of the Świerklany – Gorzyczki Segment of the Autostrada A1, *General Information*], <http://www.a1.swierklany-gorzyczki.pl/index.htm> (accessed 04-11-10) (in Polish).

⁶² *Alpine Bau* is a well known Austrian construction company.

⁶³ Biuro Budowy Autostrady A1 na odcinku Świerklany – Gorzyczki, “Opis Projektu”, [Construction Office of the Świerklany – Gorzyczki Segment of the Autostrada A1, *Project Description*], http://www.a1.swierklany-gorzyczki.pl/opis_projektu.htm (accessed 04-11-10) (in Polish).

and major delay have characterized the realization of the Autostrada A1. Current information on the status of these segments can be found in Polish news media and government websites. A more thorough history of the construction of the Autostrada A1 will have to wait for some time. A interesting thought on the limited information that has been presented here is the involvement of so many foreign companies in the realization of the Autostrada A1. The construction of the A1 and the other major highways has helped in fostering contact between Polish and other Western companies, thereby helping Polish business further integrate into Western circles.

CHAPTER V

IMPACT AND DISCUSSION

This chapter will both seek to describe the impact of the Autostrada A1 and to discuss the spatial implications of its existence. The description of the Autostrada A1's impact presented below will focus on those benefits of the highway that were responsible for giving cause to its construction. The discussion of spatial implications will touch heavily on theory in transportation geography, especially as it relates to people. It is hoped that this chapter will present the larger picture of the Autostrada A1 and its geographical significance.

The focus of this thesis has been how the Autostrada A1 as part of a larger network of highways will benefit people. Economic effects have only been mentioned insofar as they concern people. As people have been the focus of the Autostrada A1's reach, it would be appropriate to begin by describing just how many people are within arm's length of the A1 and the two other main highways in Poland. Seventy percent of Poles live within the corridors of the A1, A2, and A4.⁶⁴ In a nation of over 38 million, that is over 26.6 million people. Because the A1, A2, and A4 intersect one another, there is some overlap in the number of people who can be said to be living along the corridor of each highway. Keeping this fact in mind, one can still say that some 10 million people live along each of the three highways.⁶⁵ The A1 has an average of 20,000 inhabitants per square kilometer living along its length.⁶⁶ The completed Trans-European Network envisions nine corridors in East Central Europe, four of which are located in Poland.⁶⁷

⁶⁴ Wojciech Suchorzewski, "Nowe tendencje w transporcie i rozwoju infrastruktury transportowej Polski w powiązaniu z Europą i światem," Warsaw: Ministerstwo Rozwoju Regionalnego-Zespół Realizacyjny KPZK, 2004, 18.

⁶⁵ Eamonn Judge, "The Regional and Environmental Dimension of Polish Motorway Policy," in *Regional Studies* 34, no. 5 (2000): 492.

⁶⁶ Ibid.

⁶⁷ Suchorzewski, 8. (See footnote 64)

The Autostrada A1 provides mobility in a North-South direction but also provides access to the major East-West highways A2 and A4. This increased mobility is not only important for economic purposes but also for personal reasons, such as travel.

As has been stressed time and again, the improved access provided by the Autostrada A1 is its most fundamental benefit. The improved access provided by the Autostrada A1 has many spatial ramifications. An obvious consequence of a four-lane, divided highway with limited access which stretches from the Baltic coast to the mountains in the south of the country is that travel time across Poland will be much shorter than it currently is. The shortened travel will make travel more attractive and practical for purposes of business and leisure. It will mean that goods being transported from Gdansk to southern Poland or even the Czech Republic will arrive at their destination faster which will likely increase trade. Conversely, goods from southern Poland and the other countries of Central Europe will have better access to an outlet to the sea. Currently most goods from Poland and Central Europe are transported to Germany and the Netherlands to be loaded onto ships and not to the ports on the Baltic. Whether or not trade flows become redirected to Gdansk as a result of the Autostrada A1 is a debated issue. While the Autostrada A1 improves access to the Polish ports of Gdansk and Gdynia, the A2 and A4 provide better access to ports in Germany and the Netherlands, the concern being that trade would continue to flow with greater ease westwards to German and Dutch ports while not flowing northwards to Poland's Baltic ports.⁶⁸ A Trans-European network of highways will connect nearly every corner of the continent. It can only be expected that much of the cargo transported will travel through several countries before reaching its destination. It remains to be seen what level of benefit the "transit countries" may receive from traffic merely passing through their borders. It is important for Poland to limit the so-called 'tunnel effect', in which

⁶⁸ Judge, 489. (See footnote 65)

transportation corridors are merely “passive conduits for transit traffic”.⁶⁹ This is a difficult predicament to avoid as long as there are not sufficiently strong economic incentives for shipping to take advantage of inside the A1 corridor. These incentives would best be created by a concentration of industry inside these corridors in Poland which would be internationally competitive or at least competitive at a European scale.

Improved access can lead to greater, more localized concentrations of economic and social activity in existing larger cities. Bański predicts that future commerce in Poland will concentrate around a cluster of larger cities which the A1 will bisect.⁷⁰ Although cities often receive the most attention of transportation geographers, it is important to study the countryside as well. Even a casual observer of the field of transportation geography would notice that the field is primarily supported by research on transportation in urban environments. However, part of the inflow of economic activity into these areas will undoubtedly come from the countryside. The A1 corridor lies in an area of Poland with relatively high concentrations of car ownership compared to some voivodships in Eastern Poland. There is generally an acceptance of a positive impact provided by car ownership in rural areas. According to Gray, Farrington and Kagermeier, rural car ownership can provide “opportunity and choice”⁷¹ for residents. Ironically, however, increased mobility of rural populations (car ownership) can lead to the expectation on the part of service providers or retailers that the rural population will travel to cities for their needs instead of relying on local sources for these needs. This has been an established trend in Western countries for many decades now. Gray, Farrington and Kagermeier noted in the same chapter that the dominant trend in Western Europe and North America is a

⁶⁹ Bański, 13. (See footnote 14)

⁷⁰ Bański, 10. (See footnote 14)

⁷¹ David Gray, John Farrington and Andreas Kagermeier, Geographies of Rural Transport, in *Transportation Geographies*, ed. Richard Knowles, Jon Shaw and Iain Docherty (Singapore: Blackwell Publishing 2008), 108.

gradual decline “in the number and ranges of services” available in rural areas since the mid-century as a result of greater mobility among the rural population.⁷² This trend is damaging to some in the rural population, which is significant in Poland, especially the rural poor. The rural poor living in the area along the A1 corridor will be close to a highway which provides access to several large cities, but they may not necessarily have access to private vehicles to use the Autostrada A1. The provision of subsidized bus services would mitigate the lack of mobility experienced by the poor in the countryside but in the long-term improvement in the economic standing of the rural poor is needed so that they would be capable of providing their own mobility. It is important for people to be able to fully participate in social and economic functions which often concentrate in cities. Inclusion in these societal functions is in part enabled by accessibility.⁷³ At this point one should remember that accessibility or access can have two meanings, access to a destination provided by infrastructure and access to the needed infrastructure. The fact that rural populations can better participate in functions located in cities as a result of the access provided by a highway increases the “reach” of a city and has spatial implications at a regional level. This expanded “reach” implies the expansion of a city’s economic and social hinterland.

Fundamental to the study of transportation geography is the movement of people and goods across distances large and small. In the case of social transportation geography, the study of how transportation affects people is the primary focus. The effect of transportation on people can be largely gauged by how it affects the mobility of people and the access it provides across all settings. A good place to begin the discussion of the Autostrada A1 within social transportation geography is explaining why qualitative or critical approaches are especially

⁷² Ibid., 109.

⁷³ John Farrington and Conor Farrington, “Rural accessibility, social inclusion and social justice: towards conceptualization,” *Journal of Transportation Geography* 13, (2005), 5.

useful in understanding the A1's social effects. I have primarily approached the topic of the Autostrada A1 in this thesis with the aim of producing a qualitative description. Specifically, I have sought to highlight the social aspects of this transportation construction project. I have done so in the belief that economic consequences of this project affect society, and therefore it would seem necessary to explore the social consequences of the economic impact resulting from the completion of the A1. The sub-discipline of transportation geography known as *social transportation geography* seeks to examine this *human* impact of transportation. Social transportation geography, even as a sub-discipline is still a considerably broad subject area. Not only are other sub-fields of geography ever present but even other social sciences. The most fundamental prerequisite for considering research to be within the category of social transportation geography is that a topic must explore the relationship between people and transportation. Despite the wide breadth of social transportation geography, there are some generally agreed-upon purposes. These have been described by Zbigniew Taylor in the following way:

Studies in social transport geography serve 1) as an aid to urban and regional planning practice, 2) as a source of new and interesting data; and 3) to advance theory, notably through the collection of new material necessary for generalizing about the spatial behavior of individuals and groups.⁷⁴

Of the three general purposes described by Taylor above, the goal of providing new data or information best described the purpose of the topic of the Autostrada A1 as presented in this thesis. Due in part to the lack of literature on transportation in Poland (especially road transportation) in English, knowledge of the massive construction program in infrastructure is not widespread outside of Poland and Central Europe. English language works that do exist tend to treat road construction in Poland as part of infrastructure improvement at a national scale and

⁷⁴ Zbigniew Taylor, "Some Comments on Social Transport Geography," *Progress in Human Geography* 4, no. 99 (1980): 102.

are consequently very general in nature. Polish transportation geographers commonly examine the influences of political changes on transportation, modernization, or improvement of infrastructure and its local impact.⁷⁵ This is probably connected to the fact that ongoing infrastructure improvements or expansions are beginning to affect the daily lives of Poles. My task has been to relate the realization of the Autostrada A1 to an audience wider than that which is directly affected by the presence of this highway. This thesis has viewed the Autostrada A1 through the lens of social transportation geography and so it must both be justified why social transportation geography is an appropriate venue for studying the Autostrada A1 and provide an analysis of the A1 in the context of social transportation geography.

The quantitative –qualitative divide in transportation geography is indeed very imposing. Both methodologies can be very useful for analysis, although quantitative analysis predominates throughout the field of transportation geography. Quantitative analysis offers some seemingly comforting advantages over analysis which is derived from non-quantifiable data. The assignment of numerical values to data can simplify an amorphous body of information into manageable information. Perhaps it is due to some insecurity on the part of researchers that non-quantifiable data is not utilized to the extent of their quantifiable counterpart. All data, numerical or not, is open to interpretation, but non-quantifiable data (most often designated as qualitative data) is often perceived to encroach upon relativity. I would agree that there is the danger of such relativity in qualitative data, especially when semantic arguments ensue over the exact meaning of wording. Because social transportation geography is closely related to both traditionally quantitative disciplines, such as economics and engineering, and qualitative disciplines such as anthropology, sociology, and history, there exists a divide when considering

⁷⁵ Zbigniew Taylor, "Geografia transportu i jej wkład do teorii geografii: próba oceny," *Przegląd Geograficzny*, 72, no. 4 (2000): 500.

what constitutes solid research in transportation geography. This divide has been noted by many observers including Taylor⁷⁶ and Goetz, Vowles, and Tierney.⁷⁷ But because of the joint relevance of both quantitative and qualitative methodologies to transportation geography, there is arguably an opportunity here to observe the interaction between these them.⁷⁸ This opportunity is the confluence of the two dominant research methodologies known to academia, and the potential is enormous. If a study is conducted while employing both of these research methodologies, the conclusions reached would almost surely be more complete than if only one of the two methodologies had been used. What has been attempted in this thesis is using both quantitative and qualitative information about the Autostrada A1, its realization and effects on society, to create as complete of a picture as possible. The statistical data used was meant to provide a solid foundation for qualitative descriptions that followed. The qualitative nature of this thesis reinforces and gives meaning to the quantitative data that is available on the subject of the Autostrada A1. With many academic disciplines currently being positioned largely on one side or the other of the qualitative-quantitative divide, a fact which has major bearing on what type of recent research has been produced in a given discipline, seeking information sources from multiple disciplines would appear to be a fruitful approach for producing more complete content in one's research. Preston and O'Connor write that "Holistic, genuine interdisciplinary approaches will be required to emphasize the importance of underlying socio-economic processes as well as spatial and temporal patterns."⁷⁹ The case of the Autostrada A1 clearly requires an interdisciplinary approach and is arguably predisposed to such analysis.

⁷⁶ Zbigniew Taylor, "Origins and problems of social transport geography," *Geographia Polonica* 43, (1980): 259.

⁷⁷ Andre Goetz, Timothy Vowles and Sean Tierney, "Bridging the Qualitative-Quantitative Divide in Transport Geography," *The Professional Geographer* 61, no. 3 (2009): 324.

⁷⁸ Ibid.

⁷⁹ John Preston, and Kevin O'Connor, *Revitalized Transport Geographies*, *Transportation Geographies*, ed. Richard Knowled, Jon Shaw and Iain Docherty (Singapore: Blackwell Publishing 2008), 228.

CHAPTER VI

CONCLUSION

In the preceding chapters I have described the events and conditions which have contributed to the realization of the Autostrada A1 as well as having briefly described the construction process to date. Decentralization, bureaucratic reform, the transition to democracy and membership in the European Union have all contributed to the realization of the Autostrada A1 to a greater or lesser extent. Facts and figures have been utilized in order to better illustrate points made throughout the length of this thesis. As the A1 has not yet been completed, no authoritative work exists on its impact or spatial ramifications much less a complete account of its construction. The academic community will need to wait several more years until the highway is completed in its entirety and fully-functioning before arriving to any concrete conclusions. Even after its completion, time will be needed to measure its full impact as traffic patterns may fluctuate. Economic impacts may prove easier to predict than the social effects and certainly will be easier to either prove or disprove. Despite the inability to foresee all of the major effects of the completed A1, one can safely predict that a completed highway spanning from the port of Gdańsk in northern Poland to the Czech border will have a major spatial impact on Poland.

Opportunities in the form of an object of study which is contributive to both quantitative and qualitative methodologies of transportation geography are seldom as available as they are in the case of the realization of the Autostrada A1. The dimensions by which we can measure this event are numerous. In addition to economic and technical issues, there are multiple dimensions which touch upon the social science disciplines as well. The achievement of the Autostrada A1

is a measure of the political and administrative reform in Poland which has taken place in Poland since the end of Communism in 1989. The significance of the Autostrada A1 and the A2 and A4 are not unlike the significance of the Interstate Highway System for the United States or the Autobahn network for Germany. The new highway system in Poland will provide improved access between all points along its length just as the construction of other large highway systems have done for other countries. The Autostrada A1 will reduce the effect that distance has upon business and social relations by reducing the amount of time necessary to travel from one place to another along its length. Domestically, Poles living within the A1 corridor will experience an increased connectivity to other cities and villages. Internationally, Poles will have better access to countries to the South and countries to the North. Scandinavians and Central Europeans alike will likely experience more contact with one another as a result of the A1. Poland's trade with the West will benefit. These are but a few examples of the spatial impact that a highway can have upon its immediate environment and areas further removed.

My goal in writing this thesis has been to argue that something as simple as a highway can have many effects on its environment and itself was affected by numerous events seemingly unrelated to it. The Autostrada A1 is being realized as a result of political and economic reform which aims to integrate Poland securely into the fold of Western Europe. The Autostrada A1 itself is a means of furthering this ongoing integration. That so much can be connected to a highway is fascinating. Many who observe the construction of a nationwide network of highways in Poland do so from countries which have already achieved such infrastructure. It might be recalled then, how those networks of highways first constructed decades ago in some way transformed societies. Because we seek knowledge and shared experiences with others, we are most fortunate to be witnessing a contemporary example of this type of transformation.

FIGURES

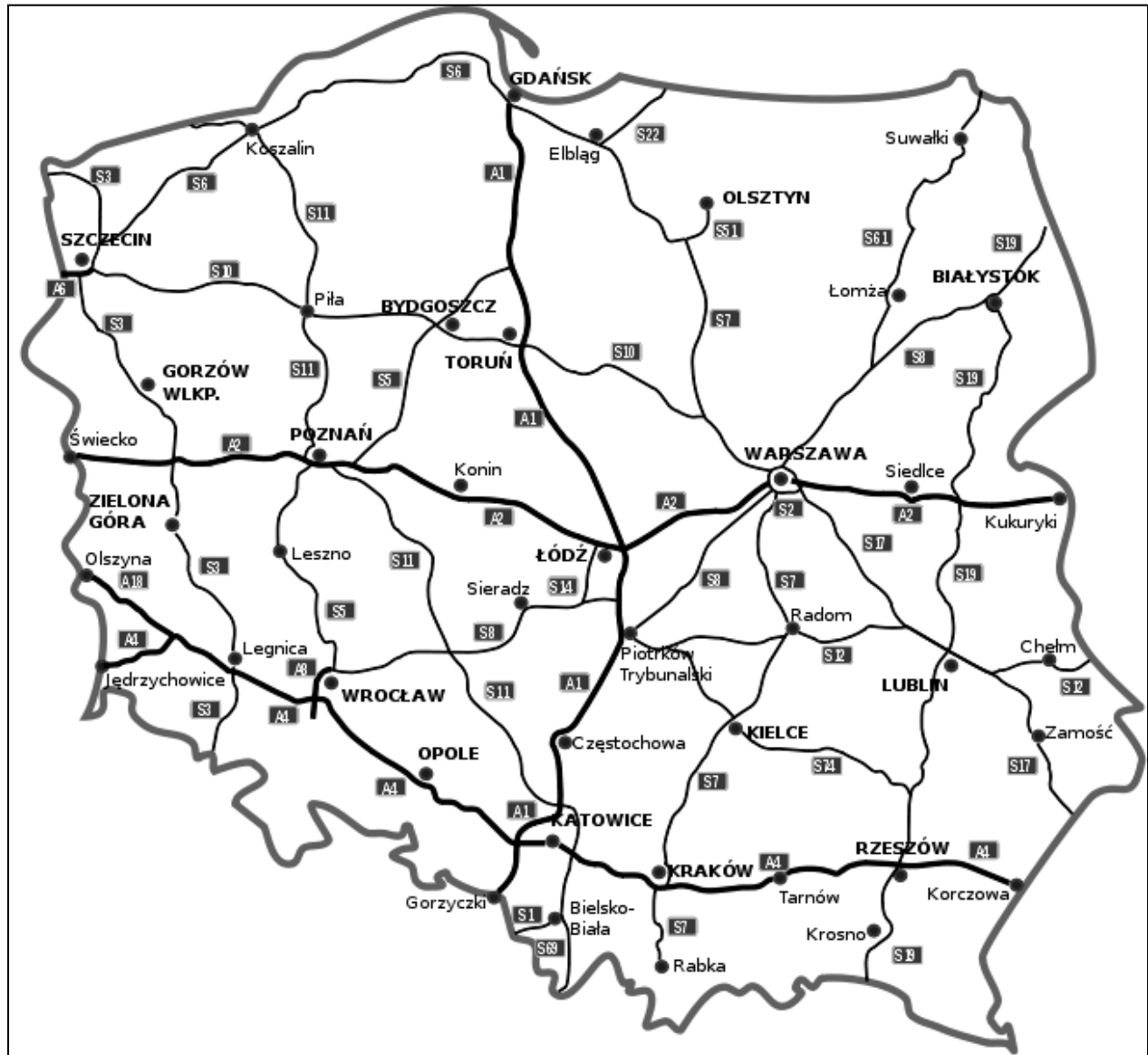


Figure 1: Highways and Expressways of Poland. (Figure taken from Wikipedia Contributors, “Expressways of Poland” Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/Expressways_of_Poland (accessed July 8, 2010))



Figure 2: Trans-European Network (TEN). (Figure taken from Wikipedia Contributors, “A1 autostrada (Poland).” Wikipedia, The Free Encyclopedia, [http://en.wikipedia.org/w/index.php?title=a1_autostrada_\(Poland\)&oldid=369989082](http://en.wikipedia.org/w/index.php?title=a1_autostrada_(Poland)&oldid=369989082) (accessed July 8, 2010))

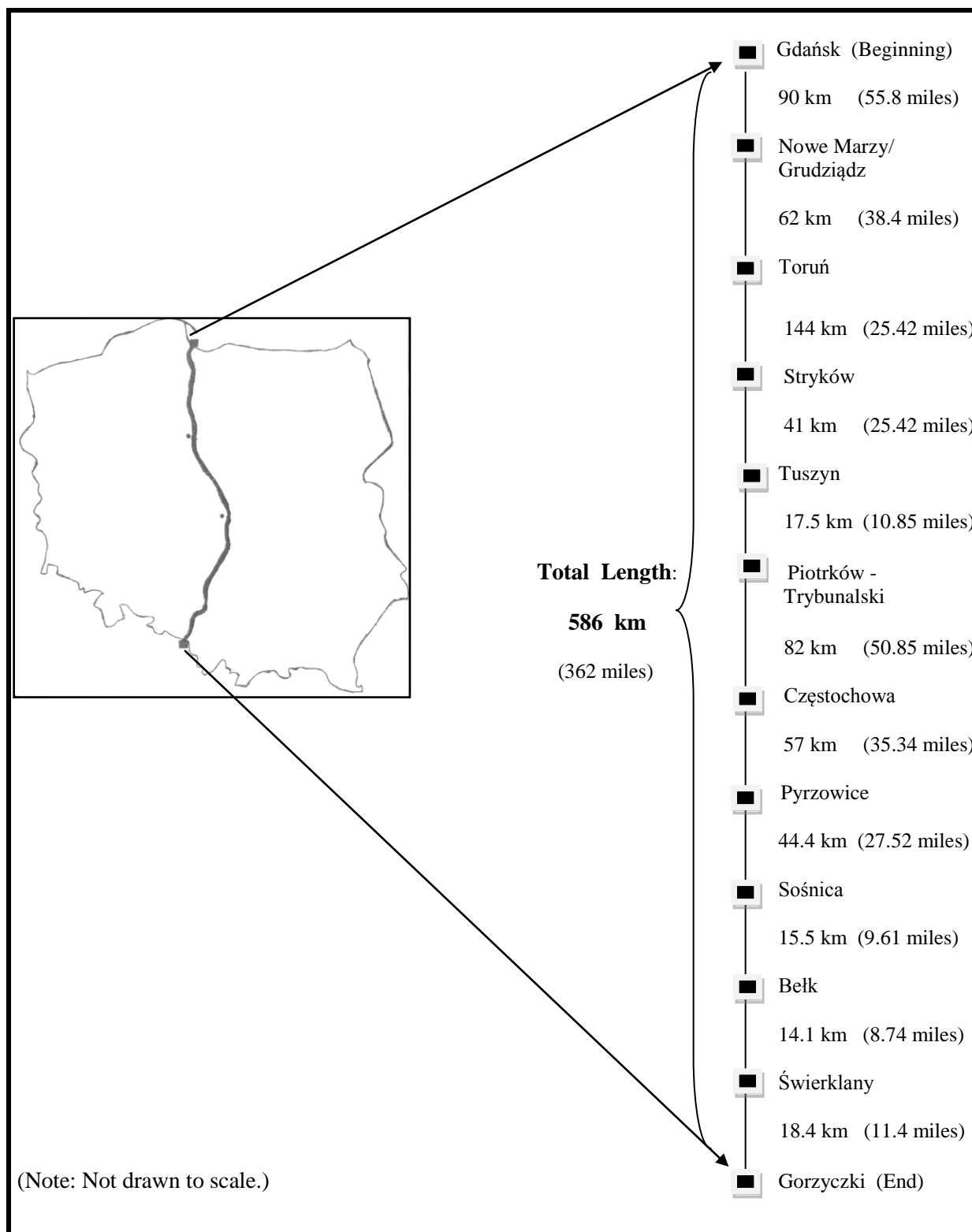


Figure 3: Segment Lengths of the Future Autstrada A1
(Figure by Author)

APPENDIX A

Abbreviations and Acronyms

BOT.....	Build Operate Transfer
DBFO.....	Design Build Finance Operate
ECMT.....	European Council of Ministers of Transport
EU.....	European Union
GDDKiA.....	Generalna Dyrekcja Dróg Krajowych i Autostrad (General Directorate for National Roads and Highways)
GTC.....	Gdańsk Transport Company
NATO.....	North Atlantic Treaty Organization
NIK.....	Najwyższa Izba Kontroli (Supreme Audit Authority)
OECD.....	Organization for Economic Cooperation and Development
OSCE.....	Organization for Security and Cooperation in Europe
PHARE	Poland and Hungary Assistance and Reconstruction
PLN.....	Polish Zlotys (currency)
PPP.....	Public Private Partnership
SF.....	Structural Funds
TEN.....	Trans-European Network
UN.....	United Nations
UNCTAD.....	United Nations Council on Trade and Development
V-3.....	Vysegrád 3 (Czechoslovakia, Hungary, Poland)
V-4.....	Vysegrád 4 (Czech Republic, Hungary, Poland, Slovakia)

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